



*Please follow all instructions carefully.*

## **General Instructions**

The enclosed labels show when your testing materials are due to the ACR. Failure to meet this due date will jeopardize completion of your accreditation. If your facility is renewing its accreditation, we cannot guarantee completion before your ACR certificate expires.

Please read and understand the documents listed below **before** beginning this process:

- A. *Diagnostic Modality Accreditation Program Overview*
- B. *Nuclear Medicine & PET Accreditation Program Requirements*

**You will need the following items from the ACR website ([www.acr.org/accreditation](http://www.acr.org/accreditation)):**

1. This *Nuclear Medicine Testing Instructions* Document
2. *ACR Phantom order form*
3. *SPECT Phantom Instructions*
4. *Nuclear Medicine Site Scanning Data Form*
5. *Clinical Test Image Data Forms* (one for each clinical examination you submit)
6. *Nuclear Medicine Quality Assurance Questionnaire*
7. *Annual Performance Tests*
8. *ACR Phantom Criteria*
9. *Important Information Memo*
10. *Pass/Fail Notice*

**You will also need these items (sent to you by mail):**

11. Bar coded identification labels for all images, forms, and requested documents

**In addition, you will need:**

12. One designated ACR approved nuclear medicine accreditation phantom.

ACR staff is available Monday through Friday, from 8:30a.m. to 5:00 p.m. (ET), to answer any questions you may have about the process. The telephone number is **800-770-0145**, and the email address is [NMAP@acr.org](mailto:NMAP@acr.org).

The ACR Web site ([www.acr.org](http://www.acr.org)) has frequently asked questions (FAQ's) for all accreditation programs under the Accreditation menu. The ACR *Appropriateness Criteria* and *Practice Guidelines and Technical Standards* can also be accessed from this site under the Quality and Patient Safety menu.

There are two portions to your ACR Nuclear Medicine Accreditation Program submission:

1. The phantom testing
2. The clinical image testing

Apply all instructions to every unit being reviewed for accreditation. Every unit must apply for all modules routinely performed on that unit for a facility to be accredited. Keep all documents for your records, and keep copies of everything you submit to the ACR for your records.

After your application is processed, the ACR assigns your facility a unique identification number (NMAP #). This number appears on all correspondence from the ACR, your online records and on all of the barcode labels. Please use this number on all submitted materials and to identify your facility when contacting the ACR for assistance.

The ACR website ([www.acr.org](http://www.acr.org)) provides a listing of accredited facilities and facilities that have applied for accreditation and are under review. If a third party payer requests verification of your participation in one of the accreditation programs, please refer them to the ACR website.

### **Materials due date:**

The barcode labels mailed to you have image submission due dates. You must collect your test images and return them with your completed application to the ACR by the date indicated on the labels. Failure to meet this due date will jeopardize completion of your accreditation. Thus, if your facility is renewing its accreditation, we cannot guarantee completion in a timely fashion before your ACR certificate expires. If your site cannot submit the required materials by your due date, notify the ACR **immediately**.

### **Image collection time period for phantom and clinical images:**

No images will be accepted for review that predate the application by more than six months.

## **Online Application**

The application for ACR Nuclear Medicine Accreditation is found online through the ACR website ([www.acr.org](http://www.acr.org)). After you submit your application online, you must log into your account, and fill out all of the forms for your Testing Package. You may print generic forms from the Nuclear Medicine Accreditation section of the ACR website so you can fill them out online later, but the data must be submitted online. You will then print the completed forms, and submit them along with your images to the ACR.

## **Clinical Image Testing Instructions**

- A. Clinical images **must** be submitted for each unit based on the exams you selected in your initial application. Barcode labels that designate the required exams for each unit are included.

### **REMEMBER:**

- 1. REVIEWERS ASSUME THAT ALL IMAGES SUBMITTED ARE EXAMPLES OF YOUR BEST WORK. IMAGES WILL BE JUDGED ACCORDINGLY.**
- 2. WHENEVER POSSIBLE, SUBMIT NORMAL NUCLEAR MEDICINE EXAMS; HOWEVER, ABNORMAL EXAMS MAY BE SUBMITTED IF NO HIGH QUALITY NORMAL STUDIES ARE AVAILABLE.**

- B. A full set of films for each exam **must** be from the same patient. Originals or original-quality copies are acceptable. Submit standard transparency images for evaluation. Images may also be submitted on CDs (please see specific instructions on submitting CDs below).

- C. Sites cannot submit examinations performed on models or volunteers.

- D. Module instructions are as follows:

### 1. Module 1. General Nuclear Medicine:

- Sites are required to submit two separate planar studies for each unit to be accredited.
- If the unit performs MUGA exams and is not applying for the Nuclear Cardiology module, you **MUST** select MUGA as your second exam. Images of the entire cardiac cycle for each projection **must** be submitted for the MUGA, as well as an image of the ejection fraction curve.
- For each scan submitted, the site is required to submit a full set of images using their standard image display technique.
- Studies will **fail** if images are not properly labeled as to laterality.

### 2. Module 2. SPECT:

- The site will be required to submit two separate SPECT studies for each unit to be assessed.
- The studies should be submitted in the standard format utilized for image interpretation at the facility.
- Images **must** be displayed in multiple planes including transverse, coronal and sagittal.
- Studies will **fail** if images are not properly labeled as to laterality and orientation.
- **If you have selected a myocardial perfusion exam, you must also apply for the Nuclear Cardiology module.**

### 3. Module 3. Nuclear Cardiology Imaging:

- Sites are required to submit SPECT myocardial perfusion images as one component of the cardiology module accreditation process. (Requires two different patient exams for this module even if myocardial perfusion exam is submitted under the SPECT module.)
- Sites are also required to submit either a gated blood pool (MUGA) or second myocardial perfusion exam.
- The SPECT myocardial perfusion images **must** include the stress and rest slices (from apex to base), as well as an image of the time activity or volume curve depicting the ejection fraction. In addition, the images depicting the ROIs (end-systole and end-diastole) used to generate the EF **must** be submitted.
- If MUGA was selected, images of the entire cardiac cycle for each projection **must** be submitted, as well as an image of the ejection fraction curve.
- Studies will **fail** if not labeled properly.

**\*\*\*NOTE\*\*\*: Two exams must be submitted for each module. Each exam must be from a different patient, (i.e. if Mr. Jones is submitted for WB Bone exam, you must submit a different patient for the Bone SPECT exam.)**

E. Complete the *Clinical Test Image Data* forms for each required examination you submit by logging into your online account and completing your testing package. The *Clinical Test Image Data* form summarizes the specific techniques including radiopharmaceutical/dose injected, scan time, acquisition parameters, etc. and **must** be completed for each exam.

- F. Each exam submitted should be submitted in the **standard format utilized for image interpretation** at the facility.
- G. Please submit **ALL** images acquired for each exam as described in the physician's report. For example, CCK pictures **must** be included with hepatobiliary exam, if acquired.
- H. Routine information, including patient name, ID#, etc., should **NOT** be deleted from films. Patient confidentiality is maintained by the ACR.
- I. Color images **must** include color scale, and where possible, standard images should include gray scale.
- J. A copy of the **corresponding, dated physician report must** be included with each exam. The report **must** clearly identify the type of exam performed and clinical history.
- K. A copy of the **written procedure** for each exam type **must** be submitted.
- L. Place all images, the *Clinical Test Image Data* form, the physician's report, and the written procedure for each exam in a **separate jacket**.

1. THE APPROPRIATE BARCODE LABEL **MUST BE ON ALL IMAGES (FOR CDS, SEE INSTRUCTIONS BELOW), REPORTS AND FORMS.**
2. THE SUPERVISING NUCLEAR MEDICINE/PET PHYSICIAN SHOULD REVIEW AND APPROVE ALL CLINICAL IMAGES BEFORE THEY ARE SUBMITTED.

**\*\*\*If you decide to change the type of exam you will be submitting, you must notify the ACR for new labels to replace that exam. All submissions will be returned if notification did not occur. \*\*\***

## Phantom Testing Instructions

**NOTE:** For phantom information, please see the specifications outlined in the *Nuclear Medicine Program Requirements*.

- A. Follow the instructions in the Nuclear Medicine Phantom Instructions.
- B. Barcode labels for each unit that designate the required protocols (planar only or planar and SPECT) are included.
- C. A completed set of *Site Scanning Data Forms* for each unit is required, along with all pertinent worksheets.

## Additional Required Paperwork

- A. One "**Quality Assurance (QA) Questionnaire**" will be completed online.
- B. The most recent "**Physicist Report**" for each unit **must** be submitted. This report should include all of the annual performance tests described in the *Nuclear Medicine Program*

Requirements that is available at our website ([www.acr.org](http://www.acr.org)). This report **must** include your most recent dose calibrator quarterly linearity, as well as your annual accuracy testing.

- C. If the Physicist Report indicates areas where corrective action is needed, documentation of the corrective action performed must be included.
- D. The most recent NRC and/or state inspection results (report) for the facility **must** be included. If unavailable, please contact the ACR.
- E. If violations were noted in the NRC and/or state inspection report, documentation of written responses to any violations **must** be included.

## **Instructions for Electronic Submission**

You may submit your clinical and phantom images on 5 ¼" CD.

Submit two (2) CD-ROMs that are identical **for each unit** (each CD contains all of the clinical examinations listed on your application for the unit). In addition, submit two (2) CD-ROMS that are identical **for each unit** (each CD contains all of the phantom images for the unit). We send the CDs out simultaneously to two reviewers to shorten the turnaround time for your final report.

**Because of the difficulties experienced with some viewers, the preferred format for submission of images on CD are JPG, GIF, BITMAP or TIF file format.**

Alternatively, images may be submitted on CDs with an embedded viewer. The embedded viewer must include the following functions:

1. window/level
2. magnification

**The following scan protocol attributes for exams must be displayed on each image:**

- First and last name
- Medical record number
- Institution name
- Date and time of examination
- Date-of-birth or age
- Type of examination
- Time of acquisition (indicated or easily calculated)
- Images labeled as to laterality and orientation

**NOTE:** *We are aware that some of the systems may not allow you to display all of the information listed above. If this is the case, please send a letter along with your CDs indicating this. However, if you have problems with actual image labeling, please contact the ACR because failure to label images as to laterality and orientation will result in a failure. You may provide a splash page or light box image depicting orientation and laterality of each view if no other method of labeling is available.*

**\*\*\*Because there are many different viewers available, we request that you send instructions for opening.\*\*\***

Once you have created the CDs for submission, you must open the images on the CDs and check both CDs for accuracy and to make sure all of the minimum requirements listed below are easily available for the reviewers.

**When you choose to submit by CD, the online system will print out two copies of all of the forms because each CD will need a separate copies of the Clinical Test Image Data Forms. Include a copy with each of the two CDs you submit.**

***IMPORTANT: It is imperative that you test the CDs on a different computer than the one that they were burned on. Each CD should be viewed to ensure that all images have been included and that all of the pertinent information, including labeling, has been transferred over. Failure to review these CDs may result in a significant delay of the review process or failure of accreditation***

## **Labeling Instructions**

Please take care in following these instructions: The correct labeling of your images (CD or hard copy films), and forms is critical to the proper identification of the materials submitted for each unit. Incorrect or incomplete labeling can delay the accreditation process. The ACR will return your package to you if your images are not labeled properly. This will delay the accreditation process.

Special barcode labels have been prepared for each of your images and data forms. Special labels have also been provided for the film jackets. You have received labels for each type of examination, examination jacket and data form. If you are submitting your clinical images on hard copy film, you may have more labels than you need. If you damage a label, use the next label in the series for that examination type. Please do not place labels over anatomic structures. **Do not alter barcode labels in any way.**

If you are submitting clinical images on hard copy film, and run out of barcode labels, use the additional image labels included in this package. Do not make copies of the existing barcode labels. Use one label per film. You must fill in all the blanks on each label. Retain a copy of the completed label sheet with the blanks filled in for your records. If you need additional labels, please contact the ACR.

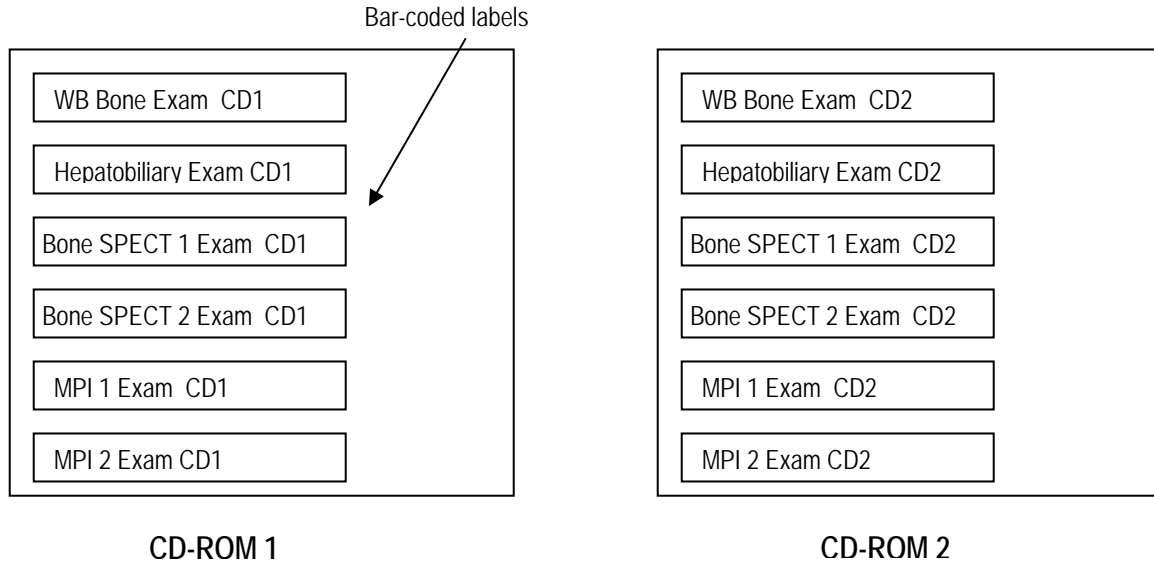
Label all forms, CD-ROM cases (**do not apply labels to your CD's**) and films submitted with the corresponding label. **Do not submit films or documents without labeling.**

### **Hard Copy submission of Clinical Images:**

- A. Place one barcode label on each sheet of film of the examination.
- B. Place each examination in its own film jacket.  
You will have two to six clinical film jackets per unit (depending on the number of modules selected) and one phantom jacket, which **you must identify** with the "film jacket" label for the type of examination. You will have separate jackets for each examination.
- C. Place the appropriate completed and labeled *Clinical Test Image Data* form, physician report, and written procedure in each clinical film jacket and the *Site Scanning Data* form in the phantom film jacket.

**Electronic Submission of Clinical Images:**

Place the barcode labels for each exam on the **jewel case** of each clinical CD-ROM. Place the “CD1” labels on the first CD, and put the “CD2” labels on the second CD. **Do not put labels on the CD-ROM. You MUST label the CD with a permanent marker (CD # and NMAP#) if your facility does not have the ability to label it with a CD compatible label.**



Place one copy of the *Clinical Test Image Data Form*, physician report, and written procedure for each examination with each clinical image CD.

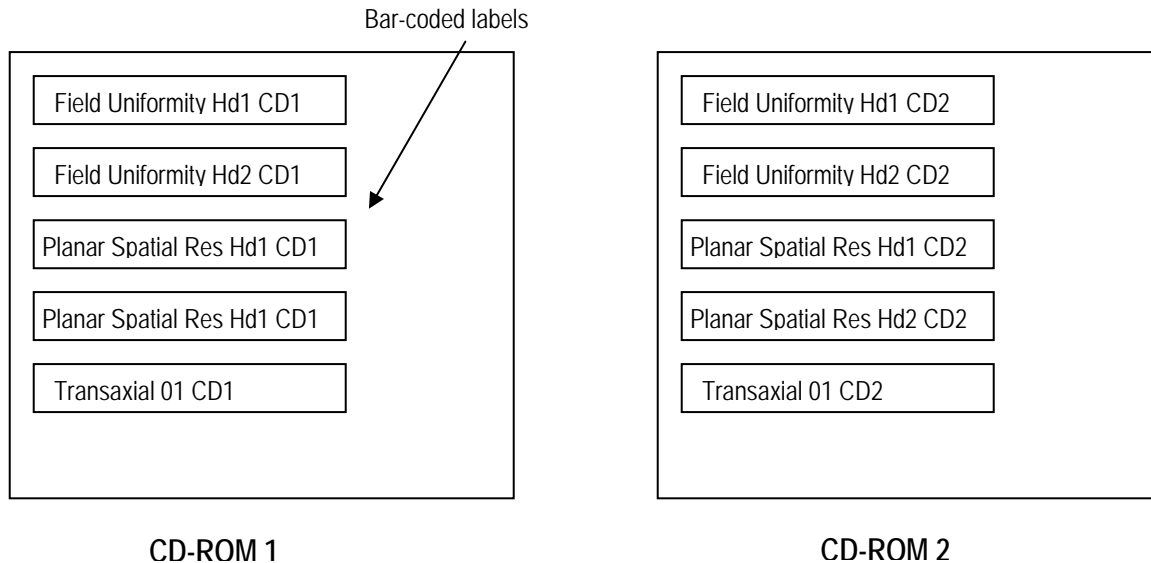
***Failure to provide the additional copies will significantly delay the review process for your facility.***

**Hard Copy submission of Phantom Images:**

- A. Place the appropriate barcode label(s) on each sheet of film.
- B. Place all phantom images in the corresponding film jacket.
- C. Place the appropriate completed and labeled *Phantom Data* form in the phantom film jacket.

**Electronic Submission of Phantom Images:**

Place the barcode labels for each phantom image on the **jewel case** of each phantom CD-ROM. Place the “CD1” labels on the first CD, and put the “CD2” labels on the second CD. **Do not put labels on the CD-ROM. You MUST label the CD with a permanent marker (CD # and NMAP#) if your facility does not have the ability to label it with a CD compatible label.**



Place the appropriate completed and labeled *Phantom Data* form in the phantom film jacket along with the CD.

***Failure to provide the additional copies will significantly delay the review process for your facility.***

## Mailing Instructions

A. Mail all images and paperwork to:

**Nuclear Medicine/PET Accreditation  
American College of Radiology  
1891 Preston White Drive  
Reston, VA 20191-4397**

B. We also strongly suggest that you use UPS or FedEx to track images in case of loss.

*The clinical and phantom images will be returned once the accreditation evaluation is complete. However, it is strongly recommended that you maintain copies of all images submitted to the ACR as a record of clinical and phantom images that were submitted for accreditation purposes.*