ABR AMERICAN BOARD OF RADIOLOG

# Remote Certifying Computer-based & Oral Exam Guide Interventional Radiology / Diagnostic Radiology

2023

## Contents

ABR

Getting Started	2
Exam Registration	
Studying for the Exam	
Technical Requirements	3
Computer System Requirements	
<ul> <li>Monitor Performance Self-Check (complete prior to exam day)</li> </ul>	
<ul> <li>Computer-based Exam Readiness Check (complete prior to exam day)</li> </ul>	
Oral Exam Self-Led Technical Check	
Location Requirements	5
Private and Quiet Space	
Permitted	
Not Permitted	
Allowable Personal Items	
Exam Accommodations	7
<ul> <li>Accommodations for People with Disabilities</li> </ul>	
Nursing and Expectant Mother Accommodations	
Exam Day Check-in	8
Starting Your Exam Day	
Oral Exam Check-in	
Identification Check	
<ul> <li>Side-View Webcam (Computer-based Exam Only)</li> </ul>	
Exam Day Logistics	11
ABR Exam Day Help Desk	
Computer-based Exam Schedule	
Computer-based Exam Breaks	
Oral Exam Dress Code	
Oral Exam Process	
Oral Exam Schedule	
Oral Exam Breaks	
Results	
IR/DR Certifying Exam FAQs	14

## **Getting Started**

#### **Exam Registration**

ABR

Registration for both the computer-based and oral exams is completed at the same time. We will send an email to you when registration opens. To register, log in to myABR and select the Cognitive Expertise option from the left-hand menu.

Please keep your email address updated in myABR to ensure that you receive important exam-related communications.

Additional details regarding exam eligibility and registration can be found on the IR/DR Certifying Exam section of the website.

#### **Studying for the Exam**

The IR/DR Remote Certifying Exam is developed by volunteers from a wide range of practice settings and reflects the breadth of information a candidate is expected to know by the time of an exam. While we offer study guides on our website, candidates should decide what type of resources they should use to study for our exams. Candidates who use test preparation materials developed by other organizations or commercial entities should not expect an ABR exam to completely align with these materials in scope or type of questions.

For additional information, please visit the studying for the exam page on the ABR website.

ABR ANTERICAN BOARD OF RADIOLOGY Home Public Diagnostic Radiolo OVERVIEW INITIAL CERTIFICATION MAINTENAN	About Us News Verify Certification Exam Details Contact Us myABR Login Ogy Interventional Radiology Medical Physics Radiation Oncology Search Q  cc of CERTIFICATION SUBSPECIALTIES CALENDAR VOLUNTEER				
Initial Certification for Interventional Radiology					
Overview	IR Residency Last verified on January 15, 2021				
Integrated IR Residency					
Independent IR Residency	On this page				
VIR Fellowship	Computerized Portion Study Guides     Oral Portion Study Guide				
Core Exam					
Certifying Exam	Certifying Exam ABR exams are developed by volunteers from a wide range of practice settings and reflect the breadth of information a candidate is expected to know by the time of an exam. While we offer study guides on our website,				

## **Technical Requirements**

#### **Computer System Requirements**

ABR

The computer system requirements listed below provide a basic overview of a system that will meet the technical requirements for ABR remote exams. Prior to your exam, you will be encouraged to complete a technical verification to ensure your system meets minimum connectivity and internet browser compatibility requirements. In addition, before each computer-based exam, there will be ample opportunity to gain familiarity with the software and systems through an Exam Readiness Check. The Exam Readiness Check will allow you to simulate the actual exam day experience well ahead of your scheduled exam and confirm that your computer and location setups meet your expectations. If you change your computer specifications or location after your initial Exam Readiness Check is complete, we highly recommend you complete it again with your new setup.

#### **Basic computer requirements:**

- Internet/Network: reliable broadband or similar internet connection
- Computer: desktop or laptop (no tablets) with Windows 10 or MacOS X 10.11 or higher
- Computer memory: minimum of 4GB RAM
- Computer drive/storage: minimum of 10GB of free disk space
- Monitor: ≥ 13" and 1080p minimum
  - Check your monitor resolution
- Keyboard and mouse
- Internet browser: latest version of Google Chrome
  - Check your version of Google Chrome
- Audio
  - Computer-based exam: Microphone and computer speakers; a headset is NOT permitted.
  - Oral exam: Microphone and computer speakers; a wired headset is recommended.
- Camera: webcam with a minimum of 640 x 480 @ 10 frames per second
  - Note: Camera will be used for exam proctoring.
  - Note: Use of virtual backgrounds is not permitted.

**IMPORTANT NOTE:** You assume full responsibility for ensuring your computer setup meets the requirements for remote exams. This includes integrity of equipment, internet connectivity, system performance, side-view webcam placement (computer-based exam only), and other issues related but not limited to the above that are outside the control of the ABR. ABR staff are not able to provide technical support regarding individual setups for remote exams.

#### Monitor Performance Self-Check (complete prior to exam day)

The <u>monitor performance self-check</u> is intended to show imaging findings that should help determine if your laptop or desktop monitor is sufficient for ABR remote exams.

#### Computer-based Exam Readiness Check (complete prior to exam day)

We highly recommend that you complete the Exam Readiness Check in the location and with the computer that you plan to use on the day of your computer-based exam.

You will receive an email with an authenticated link that will allow you to access the computer-based Exam Readiness Check after you complete your exam registration in myABR.

The computer-based Exam Readiness Check provides a unique opportunity to familiarize yourself with the exam interface and navigation before the day of your exam. It is important that you complete the Exam Readiness Check to fully understand the functionality of the computer-based exam interface, including case navigation, flagging questions, using the image manipulation tools, starting/ending a break, and question content blocking.

When the computer-based Exam Readiness Check is launched, a quick technical verification is initiated to ensure the microphone, camera, internet connection, and computer software are optimized for the exam. In addition, an identification check will be performed, as detailed <u>on page 9</u>. You may need to download an updated version of Google Chrome to complete this technical verification.

After you complete the Exam Readiness Check, Sample Questions will become available. The purpose

of these questions is not to test your knowledge of content that will be on the exam but rather to allow you to gain a level of comfort with the variety of possible question types and with navigation of exam controls.

**IMPORTANT NOTE:** We highly recommend that you complete each of these checks in the location and with the computer that you plan to use on the day of each of your exams.

#### **Oral Exam Self-Led Technical Check**

A self-led technical check will be available three to four weeks before your exam. Please complete the technical

check to ensure that your system is compliant with the ABR exam software. You will receive an email notice with information about how to access the check. The technical check shouldn't take long to complete and can be performed as many times as necessary. Make sure you are using the equipment at the location where you plan to take the exam each time you complete a technical check.

You will log in to the ABR exam software to complete your technical check. Please refer to the <u>Computer System Requirements</u> to verify that your system is compatible.

### **Location Requirements**

Your ABR Initial Certification exams will take place in a remote location of your choosing, provided it meets the basic requirements listed below. Our expectation is that the space selected will be sufficiently private where interruptions and the presence of other people would be unexpected or unlikely to occur during the exam. If location interruptions are anticipated to be frequent or prolonged, arrangements should be made to use a different location to take the exam. Brief/sporadic interruptions could occur unexpectedly. If they occur during your computer-based exam, ABR senior staff will do a post-exam review to determine if the interruptions had potentially significant impact on the exam. If they occur during your oral exam, examiners and ABR staff will work with you to complete your exam, including rescheduling to a later date if necessary. Most brief/sporadic events would likely be deemed inconsequential and have little to no impact on your exam.

#### **Private and Quiet Space**

- Alone, away from other people
- Free from background noise and interruptions

#### Permitted

ABR

- Secondary monitor not required, but may be preferred
  - If you use two monitors for the oral exam, both must be connected to the computer being used to take the exam.
  - If you use a secondary monitor for the computer-based exam, the monitor must be connected to the computer being used to take the exam and not a secondary device, and you must disable any other monitors connected to your computer.
- ABR Exam Day Help Desk Flyer
- Cell phone or other mobile device
  - A mobile device is permitted in the room as long as it is kept out of arm's reach.
  - You should have a mobile device accessible in case you need to contact the ABR regarding a connectivity issue or we need to contact you. Under no other circumstances should a mobile device be used during the exam.
  - Mobile devices may be used during breaks.
- Whiteboard (8.5" x 11" maximum), dry erase markers, and an eraser
  - Not required.
  - The whiteboard should be clean at the beginning and end of each exam session.
- Beverages and snacks
- Facial tissue
- See list of Allowable Personal Items

#### **Not Permitted**

- Other individuals in the room
- Open books, notes, scratch paper, and other study materials
- Camera or other recording devices (other than your webcam)
- Calculator (computer-based exam software includes one)
- Headphones, earbuds, earplugs, and anything else that goes in or over the ear (with the exception of the allowed items listed below)

#### **Allowable Personal Items**

ABR

Please note that you do **NOT** need to request testing accommodations for the specific items indicated below. However, if any other accommodations are needed that are **NOT** listed below, the formal <u>Exam</u> Accommodations request process must be followed.

#### **Medicine and Medical Devices**

- Arm/shoulder sling
- Bandages
- Braces: neck, back, wrist, leg, or ankle
- Casts/cervical collar
- Cough drops/hard candies
- Chapstick/lip balm
- Earplugs (ABR provided only)<sup>1</sup>
- EpiPen
- Eye drops
- Eye patches
- Eyeglasses (without a case)
- Glucose monitor
- Glucose tablets

#### Medical Devices (Attached to a person's body)

- Continuous Glucose Monitor
- Heart rate monitor
- Insulin pump
- Oxygen tank
- Spinal cord stimulator
- TENS units (Transcutaneous Electrical Nerve Stimulation) for nerve pain

#### **Communication Aids**

- Hearing aid/cochlear implant
- Vocal cord magnifiers

#### **Mobility Devices**

- Cane
- Crutches
- Knee scooter
- Walker
- Wheelchair
- <sup>1</sup> The ABR will send all candidates registered for the computer-based exam a set of earplugs well in advance of exam day.

- Handheld magnifying glass (nonelectric, no case)
- Ice packs/nonelectrical heating pads
- Inhaler
- Medical alert bracelet
- Medical/surgical masks
- Medical rubber gloves
- Nitroglycerin tablets
- Pillow/lumbar support
- Pills
- Stool for elevating a limb
- Walking boot casts

## **Exam Accommodations**

#### Accommodations for People with Disabilities

The ABR complies with the Americans with Disabilities Act (ADA) and makes reasonable accommodations in exam procedures for individuals with documented disabilities. Candidates with disabilities may request modifications in the administration of an exam. The ABR will grant such requests unless modifications would place undue burden on the ABR or fundamentally alter the measurement of the knowledge and skills the exam is intended to assess.

Candidates considering the need for modifications must submit an application (link below). For the computer-based exam, all required documentation must be submitted to the ABR no more than one year and no less than six weeks in advance of the exam date. For the oral exam, all required documentation must be submitted to the ABR no more than one year and no less than 12 weeks in advance of the exam date. Candidates anticipating the need for accommodations are encouraged to contact the ABR office well in advance to allow sufficient time for producing required documentation. Failure to comply with this deadline may result in the candidate being scheduled without special accommodations.

#### Application for ADA Accommodations

Once a candidate has been approved for exam accommodations, he or she will receive notification of approval with any updates necessary. Although candidates will accept invitations and appointments through myABR, certain accommodations may require modification to existing exam appointments. The candidate will be notified of any changes.

#### **Nursing and Expectant Mother Accommodations**

The ABR supports nursing and expectant mothers and makes reasonable accommodations in exam procedures for individuals making a request.

Nursing and expectant mothers may request modifications in the administration of an exam. Candidates should submit a request using the form provided below. For the computer-based exam, requests should be submitted to the ABR no less than one week in advance of the exam date. For the oral exam, requests must be submitted to the ABR no less than eight weeks in advance of the exam date. Typical accommodations include additional break time. Once an accommodation request is submitted, ABR staff will follow up to inquire how best to accommodate the candidate's specific needs.

Nursing/Expectant Mother Accommodation Request

## **Exam Day Check-in**

#### **Starting Your Exam Day**

ABR

You will receive two email notifications for each exam with information about starting your exam.

#### 1. Five business days prior to your exam

This notification will contain a link for starting your exam on exam day. *This link is unique to each person; please do not share with other examinees.* 

#### 2. Exam day

This notification will contain a link for starting your exam. *This link is unique to each person; please do not share with other examinees.* 

On exam day, you may also start by logging in to <u>myABR</u> and navigating to the Cognitive Expertise menu on the left-hand side.

**IMPORTANT NOTE:** The links that are emailed to you are unique to you. Please do not share with other examinees.

#### **Oral Exam Check-in**

ABR

The required check-in process is self-led and takes approximately 30 minutes. You can access the exam up to an hour before your first period. We recommend logging in to the exam software at least five minutes before your check-in report time, so you have enough time to complete the check-in process and remedy any technical issues.

#### **Identification Check**

An identification check is performed by a third party vendor. The first time you enter the exam software, you will be required to scan your ID and take a selfie with a mobile device. Each subsequent time you enter the exam software, you will be required to take a selfie with either your computer webcam or mobile device so we can verify that it is you. If additional identification information is required, ABR staff will contact you. Personal information is protected using an encrypted key code that is available only to the ABR. Identification verification will be completed in 48 hours or less, and your personal information will be permanently deleted at that time.

Identification must be from the following list and must include your signature and a recent recognizable photograph. Your name and photo must be on the same side of the ID. This ID must be current (not expired).

#### Forms of acceptable identification<sup>1</sup> are:

- Valid U.S. driver's license.
- Valid U.S. state-issued identification card.
- Valid passport or passport card.

<sup>1</sup> Military identification is not acceptable due to limitations of Title 18, US Code Part I, Chapter 33, Section 701. See more information here.

#### Side-View Webcam (Computer-based Exam Only)

## All candidates taking computer-based exams are required to use side-view webcams. Those who don't will have their exam event invalidated.

The side-view webcam placement allows more visibility of your workspace to ensure a sufficiently secure exam environment. Only one side-view webcam is required. No other webcam is needed during the exam. Please review the placement details below and watch the short demonstration video on <u>our</u> <u>YouTube page</u>.

#### The webcam placement must show a clear view of the following:

- Monitors in workspace (only one monitor may be used during the exam).
- You and the entire surface of your workspace.
- Dry erase whiteboard (if being used).

#### Below are a few hints to help you achieve an acceptable side-view webcam feed:

• Place the webcam:

ABR

- at least six inches above the workspace surface;
- three to four feet away from where you are sitting.
- Webcam cord will likely need to be at least five feet long.
- Use only one webcam during your exam.



🖌 Acceptable Side-View



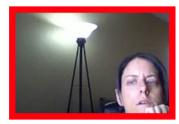
🖌 Acceptable Side-View



**O** Unacceptable Side-View Cannot see entire monitor or entire workspace



**O Unacceptable Side-View** Cannot see surface of workspace



**O Unacceptable Side-View** Cannot see monitor or entire workspace

## **Exam Day Logistics**

#### ABR Exam Day Help Desk

Approximately 48 hours before the exam, you will receive an email with the ABR Exam Day Help Desk phone number to be used only for contacting ABR staff for urgent issues related to your exam **on exam day**. If you have questions prior to exam day, please contact us at <u>information@theabr.org</u> or (520) 790-2900.

#### **Computer-based Exam Schedule**

This table outlines your computer-based exam day schedule, including breaks.

Number of Questions	Exam Time	Tutorial / Practice (minutes)	Total Exam Time	Break Time <sup>1</sup> (minutes)	Total Time <sup>2</sup>
178	3 hours and 13 minutes	20	3 hours and 33 minutes	20	3 hours and 53 minutes

<sup>1</sup>You may take more break time; however, your exam time will continue to count down.

<sup>2</sup>This is the total allotted time for the exam. Your total exam time may be less.

#### **Computer-based Exam Breaks**

Breaks are provided during each exam session (see chart above). You determine how often and when to take breaks. If you exceed the provided break time, you may still take breaks, but your exam time will be affected.

Please take time to go through the Exam Readiness Check to ensure that you have a full understanding of how to start and end breaks, and how content blocking works after you return from a break.

**IMPORTANT NOTES:** You may leave the room during break, but you must keep your webcam on and maintain your remote connection. After returning from a break, you will NOT be allowed to change (or add) a response to exam questions that were VIEWED prior to starting the break. This includes all answered, unanswered, and flagged questions.

#### Oral Exam Dress Code

ABR

Candidates should wear business attire (e.g., dress shirt and tie or corresponding appropriate professional attire).

#### **Oral Exam Process**

Candidates will use ABR software for communicating with examiners.

#### **Oral Exam Schedule**

This table outlines a typical oral exam day schedule. Your specific details, including the date and time of your oral exam, will be sent to you approximately eight weeks before the exam.

Check-in	Number of Questions	Exam Time	Total Time <sup>1</sup>
Approximately 30 minutes	N/A	2 hours	3 hours and 10 minutes

<sup>1</sup>Total time includes check-in, exam time, and a 10-minute break after each exam period.

#### **Oral Exam Breaks**

There is a 10-minute break after each exam period.

**IMPORTANT NOTE:** You may leave the room during a break, but you must keep your webcam on and maintain your remote connection.

#### Results

ABR

Results for the computer-based component of the IR/DR Certifying Exam will be posted approximately one month after the exam. All ABR computer-based exams go through six scoring phases. After your exam administration, you can check the website for real-time updates on the current phase of the exam scoring process.

Results for the oral component of the IR/DR Certifying Exam will be posted approximately two weeks after the last day of the exam.

Your results will be posted in myABR. Your program director and chair will receive aggregated exam performance data to help in evaluating and improving their training program.

1	2 Initial Scoring	3 Quality Assurance	4 Secondary Scoring	5 Validation	6 Release Results
Phase 1: Collect		ndidate responses at all candidate re tem			

Please refer to the exam results page for more information.

ABR AMERICAN BOARD OF RADIOLOGY	About Us News Verify Certification Exam Details Contact Us myABR Login			
Home Public Diagnostic Radiology Inte	erventional Radiology Medical Physics Radiation Oncology Search Q			
OVERVIEW INITIAL CERTIFICATION MAINTENANCE OF CERTIFICA	ATION SUBSPECIALTIES CALENDAR VOLUNTEER			
Initial Certification for Interventiona	al Radiology			
Overview	IR/DR Certifying Exam Scoring and Results			
Integrated IR Residency				
Independent IR Residency	Last verified on January 19, 2021			
VIR Fellowship	On this page			
Core Exam	Exam Scoring     Exam Results			
Certifying Exam	• Lam Results			
Overview				

ABR

#### 1. How do you know it is me taking the remote exam?

You will provide picture identification and a selfie prior to the exam. When entering the exam, a selfie is captured and compared with the information provided to confirm your identity.

#### 2. Can I take the remote exam on a laptop or tablet?

ABR remote exams can be taken on a desktop computer or laptop with a Windows or Mac operating system. You may not use a tablet, iPad, Kindle, or other mobile device.

#### 3. Are secondary or overflow monitors allowed?

For the computer-based exam, you may use only one monitor, but that monitor can be a secondary one. The monitor must be connected to the computer being used to take the exam and not a secondary device. For the oral exam, you may use two monitors. If two monitors are used, both must be connected to the computer being used to take the exam.

#### 4. Where should I take the remote exam?

Please refer to the information in Location Requirements for details on the location you choose for your exam.

#### 5. What electronic devices are allowed?

No electronic devices other than the computer being used to test, one mobile device for contacting the ABR, and a webcam are allowed in the room. This includes signaling devices such as pagers and alarms, cameras or other photographic or duplicating devices (other than the webcam), personal digital assistants (PDAs), recording devices or other hand-held computers, tablets, and digital music players (e.g., iPod).

#### 6. Can I use books or notes during the remote exam?

No. Please refer to Location Requirements for details.

#### 7. Can I use additional software during the remote exam?

No. You must close all other programs or windows on your computer before you begin the exam.

#### 8. Will I be required to do a room scan of the location where I am taking my exam?

You may be asked to perform a routine scan of your workspace during the exam. ABR staff will provide instructions if this procedure is needed.

#### 9. What if I need to use the restroom during the remote exam?

For the computer-based exam, you can select the break function in the exam software. Any exam content you have viewed prior to your break will not be available to answer after you return, so you will want to answer all items that you have viewed before taking a break. You may be asked to complete another room scan after returning from a break. For the oral exam, a 10-minute break is provided after each exam period.

#### 10. What if I need to leave the room during the remote exam?

You may not exit the camera view or use a cell phone or other electronic devices during the exam unless there is a failure in connectivity or you are on a break.

ABR

Accommodations are available to candidates needing more time to take the exam. Requests for accommodations must be made in advance of the exam date. Please refer to the Exam Accommodations page on our website for more information.

#### 12. Is someone watching me while I take the remote exam?

Yes. For the computer-based exam, the exam software will continuously record both you and your testing environment through the webcam feed. ABR staff will view exams live and review recordings after the exam. For the oral exam, your examiner will be watching you, and an examiner in training or an ABR associate executive director or trustee may also observe your exam session without your or your examiner's knowledge. In addition, the ABR requires video, audio, and screen capture.

#### 13. How do I access the remote exam on exam day?

Please refer to Starting Your Exam Day for more information about how to start your exam.

#### 14. Do I need to schedule my exam time in advance?

Yes. You will need to complete the exam registration process to secure a slot for both the computer-based and oral exams. You will register for both exams at the same time. Please see Exam Registration for more information.

#### 15. How do I know that my privacy is protected?

The ABR and its partners use encryption technology that ensures your information is secure when it leaves your computer and is stored in the cloud. All information collected during the exam is done securely. The online proctored exam information is stored in a fully secure environment.

#### 16. Will the ABR ever give out my personal information?

Never. The ABR does not share personally identifying attributes of any user.

#### 17. Who can view exam recordings?

Only the ABR can unlock and view the exam recordings. Data is secured using a state-of-the-art encryption technology that ensures that all your exam data is safe from hacking attempts. Exam recordings are permanently deleted within 10 days.

#### 18. Can I talk to other people about the exam?

You are prohibited from communicating, reproducing, or transmitting any exam content in any form for any purpose. Copying or communicating content is a violation of the ABR Exam Security Policy.



## **Useful Resources**

myABR: https://myabr.theabr.org/

Monitor Performance Self-Check: https://www.theabr.org/monitor-performance-self-check-dr-and-ir

