

Remote Certifying Exam Guide Diagnostic Radiology

2024

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Getting Started

Exam Registration

Registration for this exam is completed in <u>myABR</u>. You will receive an email from the ABR when registration opens. 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 in the <u>Certifying Exam section</u> of the website.

Studying for the Exam

The Diagnostic Radiology 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 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.



Technical Requirements

Computer System Requirements

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, there will be ample opportunity before each exam 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: microphone and computer speakers
- 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, 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 setup for remote exams.

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

The monitor performance self-check shows imaging findings that will help determine if your laptop or desktop monitor is sufficient for ABR remote exams.

Exam Readiness Check and Sample Questions (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 exam day.

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

The 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 exam interface, including case navigation, flagging questions, using the image manipulation tools, starting/ending a break, and question content blocking.

IMPORTANT NOTE: We highly recommend that you complete the Exam Readiness Check in the location and with the computer that you plan to use on exam day.

When the Exam Readiness Check is launched, a quick technical verification is initiated to ensure that your microphone, webcam, internet connection, and computer software are optimized for the exam. In addition, an identification check will be performed, as detailed on page 8. 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.

If you plan to take the exam at a hospital or work institution, we recommend that you contact your IT department and ask them to whitelist all sites required for the exam. The necessary information can be found on the Remote Exam Technical Specifications for Institutions page.

Location Requirements

Your ABR computer-based Initial Certification exam will take place in a remote location of your choosing, provided that place 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. These events would likely be deemed inconsequential. Exams will be viewed live and recordings reviewed after the exam by ABR staff. We will contact you either during or after the exam if we notice an issue. You may be asked to perform a scan of your workspace during the exam. ABR staff will provide instructions if this procedure is needed.

Private and Quiet Space

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

Permitted

- Secondary monitor
 - Not required but may be preferred. The monitor must be connected to the computer being used to take the exam and not a secondary device.
 - If you choose to use a secondary monitor, you will need to disable any other monitors connected to your computer.
- ABR Exam Day Help Desk Flyer
- Cell phone or other mobile device
 - 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.
 - Your mobile device is permitted in the room as long as it is kept out of arm's reach.
 - Mobile devices may be used during breaks and intermissions.
- Whiteboard (not more than 18 inches on one side), dry erase markers, and an eraser
 - Not required but may be preferred. Pen and paper are not permitted.
 - The whiteboard must 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, and other study materials
- Camera or other recording devices (other than your webcam)
- Calculator (exam software includes a calculator)
- Scratch paper, pens, and pencils
- 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

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 Exam 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)¹
- EpiPen
- Eye drops
- Eye patches
- Eyeglasses (without a case)
- Glucose monitor
- Glucose tablets

- Handheld magnifying glass (nonelectric, no case)
- Ice packs/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

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

¹ The ABR will send all registered candidates a set of earplugs well in advance of exam day.

Exam Accommodations

Accommodations for People with Disabilities

The ABR complies with the <u>Americans with Disabilities Act (ADA)</u> 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).

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. Candidates anticipating the need for accommodations are encouraged to contact the ABR office well in advance to allow sufficient time for producing any required documentation.

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 register for exams and select start times through myABR, certain accommodations may require modification to existing exam appointments. The candidate will be notified of any changes.

Lactating and Expectant Parent Accommodations

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

Lactating and expectant parents may request modifications in the administration of an exam. Examinees should submit a request using the form provided at the link below. Requests should be submitted to the ABR no less than one week in advance of the exam date. Typical accommodations include additional break time. After an accommodation request is submitted, ABR staff will follow up to inquire how we can best accommodate the examinee's specific needs during the exam event.

Lactating and Expectant Parent Exam Accommodations Request

Exam Day Check-in

Starting Your Exam Day

You will receive two email notifications 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 myABR.

Identification Check

An identification check is performed by a third party vendor. The first time you enter the exam software, either through the Exam Readiness Check prior to exam day or on the day of the exam, 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, an ABR staff member will contact you after the exam. Personal information is protected using an encrypted key code that is available only to the ABR. Identification verification will be completed in 24 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 are:

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

¹ 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

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 our YouTube page.

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:
 - 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



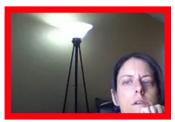
√ Acceptable Side-View



Unacceptable Side-View Cannot see entire monitor or entire workspace



Unacceptable Side-View
Cannot see surface
of workspace



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 information@theabr.org or (520) 790-2900.

Schedule

This table outlines your exam-day schedule, including breaks and intermission.

Day	Session	Number of Questions	Exam Time	Tutorial / Practice (minutes)	Total Exam Time	Break Time ¹ (minutes)	Total Time ²		
1	a	118	2 hours and 8 minutes	20	2 hours and 28 minutes	15	2 hours and 43 minutes		
Required intermission (60 minutes)									
1	b	180	3 hours and 15 minutes	N/A	3 hours and 15 minutes	20	3 hours and 35 minutes		
	All						7 hours and 18 minutes		

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

Breaks

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

Please take time to go through the Exam Readiness Check to ensure 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 a 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.

²This is the total allotted time for the exam. Your total exam time may be less.

Intermission

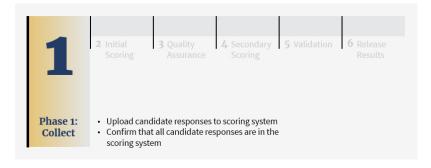
Intermission is a required 60-minute break between exam day sessions. If you end your first exam session early, you will not be able to start the second session early. A reminder of the start time for your second session will be provided when you end your first session. When you end your first session, you will be logged out of the exam. You should close your browser to end the webcam recording. You will need to re-establish your remote connection when you start your second session.

Scoring and Results Posting

Results for the Certifying Exam are 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 scoring process.

All ABR exam scoring is criterion referenced, meaning that a passing standard is established in advance of the exam. The exam is not graded on a curve and there is no set percentage of failures.

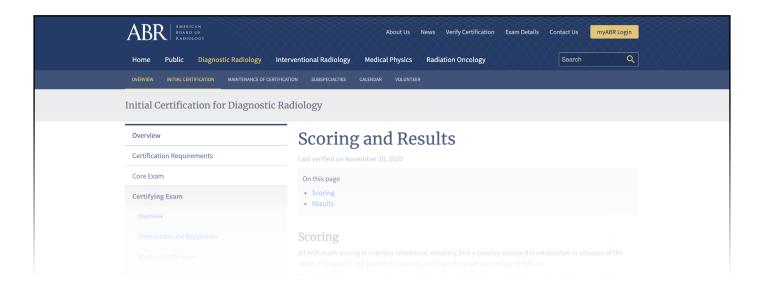
The Certifying Exam is scored as pass or fail, and feedback will be provided. The one required module and the three



elective modules all must be passed as a group. If the result is "fail," you must retake the entire exam.

After the exam has been scored, your results will be posted in <u>myABR</u>. Your program director and chair will receive aggregated exam performance data to help in evaluating and improving their training program.

Please refer to the scoring and results page for more information.



Computer-based Remote Exam FAQs

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. May I take the remote exam on a laptop or tablet?

ABR remote exams may 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?

Yes. A secondary or overflow monitor is allowed. The monitor must be connected to the computer being used to take the exam and not a secondary device. If you choose to use a secondary monitor, you will need to disable any other monitors connected to your computer.

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. May I use books or notes during the remote exam?

No. Please refer to Location Requirements for details.

7. May 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?

You can select the Break function in the exam software. Any exam content you have seen prior to your break will not be available to answer after you return, so you should answer all items that you have seen before taking a break.

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. You may exit the webcam view and use your cell phone or other electronic devices during the intermission.

11. What if I need extra time to take the remote exam?

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. The exam software will continuously record both you and your testing environment through the webcam feed. Exams will be viewed live and recordings reviewed after the exam by ABR staff.

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 a specific exam event. 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 an encryption technology that ensures that your exam data is safe from hacking attempts. Exam recordings are permanently deleted within 10 days.

18. May I talk to other people about the exam?

No talking or any other form of communication is permitted once your exam has begun. Additionally, you are prohibited from reproducing, communicating, 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









