



TOPICAL STUDY GUIDE

Limited License Radiology Technician, CLLRT



American Allied Health

NATIONAL CERTIFICATION & REGISTRATION



American Allied Health (AAH), for nearly two decades, has been featured in health science textbooks as a leading allied health certification & credentialing agency.

AAH partners with U.S. State Departments of Education to provide certification and continuing education courses for over ten different health career vocational pathways; our 10,000+ members work in all 50 states and over 30 countries overseas.

For more information, visit: www.AmericanAlliedHealth.com

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These policies are subject to revision without notice.



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Eligibility to Sit for the Exam

To sit for any AAH national certification exam, you must first demonstrate your eligibility by submitting "Proof of Eligibility." You will be asked to upload documentation directly to your AAH account (.PDF, .doc, docx, .JPEG or .PNG). Your paperwork will be reviewed and approved by AAH within 24-48 hours. You may complete this step before or after registration, and if your application is denied, your registration fee will be fully refunded.

Eligibility Requirements

To sit for the exam, you must satisfy at least **one** of the following requirements.

- a. Completion of a related course or training program, or
- b. One year's work experience in the field, or
- c. Relevant military training, or
- d. Previously have been certified by another agency

Approved Documentation

To demonstrate your eligibility, you must upload to your AAH account at least **one** of the following forms of documentation.

***Note:** If you have been instructed to enter a Registration Code or School Code by one of our AAH-Affiliated testing partners, you won't be required to submit any documentation.

Copy of either school transcript, diploma, or certificate

Letter from employer indicating job title and length of employment

Check stub indicating job title and hire date

DD Form 214 (for military personnel)

Member ID or Certification # from previous certification agency

Enter an Exam Registration Code or School Code*



How to Earn National Certification Online

The Certification Process



STEP 1

Register Online

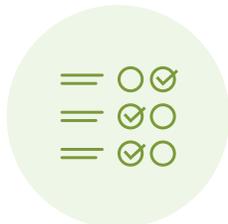
Register for the exam at:
www.AmericanAlliedHealth.com



STEP 2

Confirm your Eligibility

Show AAH you're qualified to sit for the exam, by submitting proof of eligibility documentation (see page 1).



STEP 3

Take the Exam Online

Get instant results and access to your certification documents.

Examination Format

ALL EXAMS

150 questions

Multiple choice & true/false

120 mins

Exams are timed; the test must be taken in one sitting

75%

Passing score

Free Study Materials

What's included in the registration fee?

Free Practice Exams

Free Topical Study Guide

Free Retake Examination



CLLRT Exam Content

Certification Type	Credentials	Pricing
Limited License Radiology Technician	CLLRT	\$125 Register

Competency-Based Testing

AAH certification exams evaluate key competency areas expected of entry-level allied health professionals. These "competencies" are demonstrated by the applicant's ability to apply – in a testing environment – their understanding of the relevant knowledge, skills, and abilities (KSAs) that are determined by the American Allied Health Board of Examiners.

Core Competency Areas

The exam tests for "Knowledge, Skills, and Abilities" (KSAs) in the following core competency areas:



- 8% The Profession and the Professional
- 15% The Framework of Radiographic Equipment
- 5% Essential Mathematics for Limited Machine Operators
- 12% Foundational Physics for Radiography
- 8% The Safety Precautions of Radiation
- 12% Introduction to Anatomical Positioning
- 2% Image Acquisition & Evaluation
- 5% Medicolegal Aspects of Radiography
- 12% Safety Implementation and Infection Control
- 12% Evaluation of Patients in Acute Situations
- 5% Drug Administration
- 4% Bone Densitometry

Examination Format & Criterion

- Online Computer-Based Testing (CBT)
- 150 multiple choice & true/false questions
- 120 mins
- The passing score is 75%





Topical Breakdown

Use the following topical guide to help you prepare for the exam:

I. Overview of Limited Radiography

a. The Profession and the Professional (8%)

- Radiography
- Limited X-Ray machine operator
- Certification requirements
- Standard duties of a Limited X-ray Machine operator

b. The Framework of Radiographic Equipment (15%)

- X-ray room
- Radiographic table, console control, transformer cabinet
- Positioning of the X-ray tube and beam

c. Essential Mathematics for Limited Machine Operators (5%)

- Fundamental mathematical principles
- Mathematics applied to radiography

II. X-Ray Science and Safety

d. Foundational Physics for Radiography (12%)

- Matter, energy, electromagnetic energy
- Electromagnetic induction and transformers
- X-ray production and digital Imaging
- Formulating X-ray techniques

e. The Safety Precautions of Radiation (8%)

- Fundamental radiation safety
- Radiation quantification
- Effects of radiation exposure
- Radiation safety factors

III. Radiographic Anatomical Positioning and Pathology

f. Introduction to Anatomical Positioning (12%)

- Skeletal positioning of the upper limb, shoulder girdle, lower limb, pelvis, spine, bony thorax, chest, abdomen, skull, facial bones
- Pathological aspects of radiology

g. Image Acquisition & Evaluation (2%)

- Viewing radiographs
- Systematic image review
- Image identification and markers

IV. Patient Care and Professionalism

h. Medicolegal Aspects of Radiography (5%)

- Ethics concepts and values
- Legal considerations
- Professional communication
- Proper documentation of medical records

i. Safety Implementation and Infection Control (12%)

- Workplace safety
- Accidents and incident reports
- Infection control, infectious disease, disease prevention
- Standard precautions and surgical asepsis

j. Evaluation of Patients in Acute Situations (12%)

- Obtaining a medical history
- Acute situations and physiological needs
- Management of patient's current physical status

V. Additional Clinical Skills

k. Drug Administration (5%)

- The role in medication administration and documentation
- Routes of administration, medication properties, medication adverse effects

l. Bone Densitometry (4%)

- Comparisons of DXA and conventional radiography
- Principles of DXA
- Numerical measurements of Bone Densitometry



Sample Test Questions

! Next page contains Answer Key

-
- Contaminated needles must be disposed of into a _____ .
 - Biohazard bag
 - Sharps container
 - Metal garbage can
 - Glass jar

 - The omission of reasonable care or caution defines _____ .
 - Libel
 - Slander
 - Defamation of character
 - Negligence

 - A mechanism that tends to stop a moving part in a specific location is called a _____ .
 - Collimator
 - Control console
 - Transformer
 - Detent

 - In which circuit is the step-up transformer located?
 - Incoming
 - Filament
 - Low-voltage
 - High-voltage

 - Which plane divides the body into equal right and left halves?
 - Midcoronal
 - Midsagittal
 - Transverse
 - Axial



Sample Test Questions: Answer Key

1. Contaminated needles must be disposed of into a _____ .

- a. Biohazard bag
 - b. Sharps container** ◀ CORRECT
 - c. Metal garbage can
 - d. Glass jar
-

2. The omission of reasonable care or caution defines _____ .

- a. Libel
 - b. Slander
 - c. Defamation of character
 - d. Negligence** ◀ CORRECT
-

3. A mechanism that tends to stop a moving part in a specific location is called a _____ .

- a. Collimator
 - b. Control console
 - c. Transformer
 - d. Detent** ◀ CORRECT
-

4. In which circuit is the step-up transformer located?

- a. Incoming
 - b. Filament
 - c. Low-voltage
 - d. High-voltage** ◀ CORRECT
-

5. Which plane divides the body into equal right and left halves?

- a. Midcoronal
- b. Midsagittal** ◀ CORRECT
- c. Transverse
- d. Axial



About Online Testing

Computer Based Testing (CBT)

All examinations are taken via AAH's secure online Computer-Based Testing (CBT) Portal. The exam is taken while logged into your AAH account, at www.AmericanAlliedHealth.com, either from your own home computer or onsite, if directed by one of our 300+ AAH-Affiliated Testing Partners.

Test Results

All scoring is determined via the CBT portal's computer calculations and test results are shown immediately. Upon passing the exam, you immediately gain access to documentation of a passing grade, as well as your official certification documents themselves.

Retake Examinations

The first retake examination is included in the initial registration fee. There is no mandatory cool off period between retake exams; you may initiate a retake exam from within your AAH account whenever you are ready. And if you need additional test attempts, further examinations may be purchased for a small retake fee.

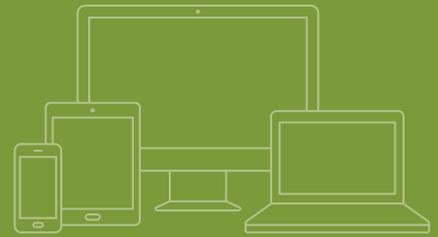
Appeal Policy

Candidates who receive a non-passing score have the ability to appeal their test results up to 30 days after an examination attempt. Appeals must include the candidate name, date of testing, and description of the reason for appeal.

Send requests directly to appeals@americanalliedhealth.com – the Appeals Review Committee will respond within 15 days of submission.

System Requirements

The online exam is compatible with all modern web browsers and both Apple and/or PC systems.



The testing portal may be accessed the device of your choosing:

- Desktop computer
- Laptop
- Chromebook
- Tablet
- Mobile device



General Information

What is National Certification?

Certification provides standardized, third-party evaluation of the competencies of allied health professionals—according to national standards of care. This is why it is often required by employers. Certification has become standard practice for joining allied healthcare careers.

National Certification vs State Licensure

Certification is not the same thing as a state licensure program. This can be confusing because some states require active AAH certification as a pre-requisite to applying for licensure in that state—but earning the certification itself is a non-governmental process. Most states do not have a licensure requirement beyond AAH certification. Use our searchable Regulations Map to verify there are no additional requirements beyond AAH certification to work in your state.

Competency-Based Testing

AAH certification exams are designed to evaluate key competency areas expected of entry-level allied health professionals. These “competencies” are demonstrated by the applicant’s ability to apply—in a testing environment—their understanding of the relevant knowledge, skills, and abilities (KSAs) that are determined by the American Allied Health Board of Examiners.

AAH Board of Examiners

AAH’s question pool is developed, maintained, and systematically peer-reviewed by a panel of subject matter experts, medical doctors, pharmacists, and educators, who are collectively referred to as the



“Board of Examiners.” The Board is responsible for ensuring AAH’s standardized exams test for key competency areas which are in line with national standards of care.

Membership in the American Allied Health Association

Those who pass the national exam are automatically placed on AAH’s national registry and receive free membership in the American Allied Health Association. Benefits include gaining access to AAH’s library of continuing education courses, employee verification and documentation services, digital record keeping, professional networking, and more.

Code of Conduct and Disciplinary Process

To create an AAH account and register for an exam, all users must first read and agree to AAH’s Code of Conduct and the website’s Terms and Conditions. If any member is found to be in violation of these standards, then, in accordance with our written Disciplinary Policy and Bylaws, that member’s certification may be revoked.



Renewal Process: How to Keep Your Certification

After you pass a national exam, your certification remains active for one year; afterward it must be renewed annually to keep your credentials current. As long as you maintain your certification, you will not need to retake the exam.

Keeping your certification current is simple: everything is done online, once a year, directly within your AAH account. There are only two renewal requirements: paying renewal membership dues and completing online continuing education (CE) courses (or upload your own external documentation of completed CE courses).

How often do I renew? How much does it cost?

To keep your certification current you must renew once a year by logging back into your AAH account. The annual membership renewal dues are \$32.00 per year.

Renewal Requirements

1

Pay annual renewal dues:

\$32.00

2

Complete Continuing Education:

5 CEs

Late Renewals

In most cases renewal is still possible after paying a small late fee. But depending on your last expiration date, you may have to re-register and retake the exam.



Renewal by Reciprocity

If you were previously certified with another agency, and your certification has not been expired longer than 3 years, then you may renew your certification with AAH without retesting. You may apply for renewal by reciprocity within your AAH account by uploading a copy of your previous certification card, or official documentation showing your previous MemberID/Certification# and latest expiration date.



Continuing Education

What is the Continuing Education (CE) Requirement?

To keep your certification current you must complete at least 5 CE credits before your next expiration date. You can get these credits anytime throughout the year by taking a short, online CE course provided by AAH – or by uploading documentation of your own external CEs (CEUs, CECs, or CEHs) you have earned that year.

Online CE Courses Provided by AAH

AAH provides a library of online CE courses; you may self-study the material and take a small quiz over the content. Upon course completion, CE credits are automatically applied towards your account for renewal.

How to Import External CE Credits

If you have completed any external CE courses within the last year, you may upload documentation of your training directly into your AAH account. Your documents will be reviewed, and if approved, your CE credits will be imported into your AAH account. There is, however, a small processing fee when applying external CEs towards renewal.

Two ways to apply CEs towards your certification

- A Get AAH CE Credits
- B Import non-AAH CEs

Health Education Courses

STUDENT David Smith

Healthcare Education Course	5 credits	6/24/2021
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Documentation of non-AAH continuing education must include:

- Name of continuing education provider
- Student's name
- Name of the training or course
- Date of training or issue date
- Number of CE/CEU/CECs/Hours earned



American Allied Health

NATIONAL CERTIFICATION & REGISTRATION

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