National Registry of Emergency Medical Technicians®
THE NATION'S EMS CERTIFICATION™

National Registry Emergency Medical Technician Examination Specifications

About the Emergency Medical Technician Examination Specifications

The "National Registry Emergency Medical Technician (EMT) Examination Specifications" provides important information about the EMT Certification Examination for stakeholders, such as current candidates, Emergency Medical Services (EMS) students, and EMS educators. The EMT Certification Examination will be administered starting Spring 2025.

This document outlines the content of the examination, as determined through the *2023 Basic Level Support Practice Analysis Report for the Level of Emergency Medical Technician (EMT),* and it provides information regarding the development and administration of the examination. Also included are sample items and information about the item development process.

Examination Purpose

The aim of the EMT Certification Examination is to determine whether EMS professionals at this provider level can demonstrate the entry-level knowledge, skills, and abilities that are required to competently perform their job. The newly certified EMT is able to safely evaluate and manage a scene, as well as assess, treat, and document non-critical or life-threatening conditions within their scope of practice. The entry-level EMT can safely transport to the appropriate facility or request additional resources. An entry-level EMT understands the importance of their well-being, role, and responsibilities within the EMS system.

Development of the Test Plan

The EMT Certification Examination has evolved over the past five decades to become the most valid, reliable, and respected measurement tool employed by millions of EMS providers nationwide in their quest to attain National EMT Certification. In order to ensure the examination measures current practice, the National Registry conducts practice analysis studies to identify the knowledge, skills, and abilities (KSAs) required in the EMS practice settings. The information gathered by practice analysis studies is then used to determine the content of the examinations, also known as a "test plan."

The *2023 Basic Level Support Practice Analysis* examined the knowledge and skills needed for the EMT as it related to critical job tasks that the EMT performs. The tasks were grouped into the following five areas: 1) Scene Size-up and Safety, 2) Primary Assessment, 3) Secondary Assessment, 4) Patient Treatment and Transport, and 5) Operations.

Content for the EMT Certification Examination

Content Domains

The *2023 Basic Level Support Practice Analysis* evaluated critical job tasks performed by the EMT for the five areas, or "domains," described above. These five domains are collectively referred to as the "content domains":

1. Scene Size-up and Safety
2. Primary Assessment
3. Secondary Assessment
4. Patient Treatment and Transport
5. Operations

Content Outline

The content domains, job tasks, and the associated knowledge and skills form the basis of the EMT Certification Examination. The content outline for the examination is presented below:

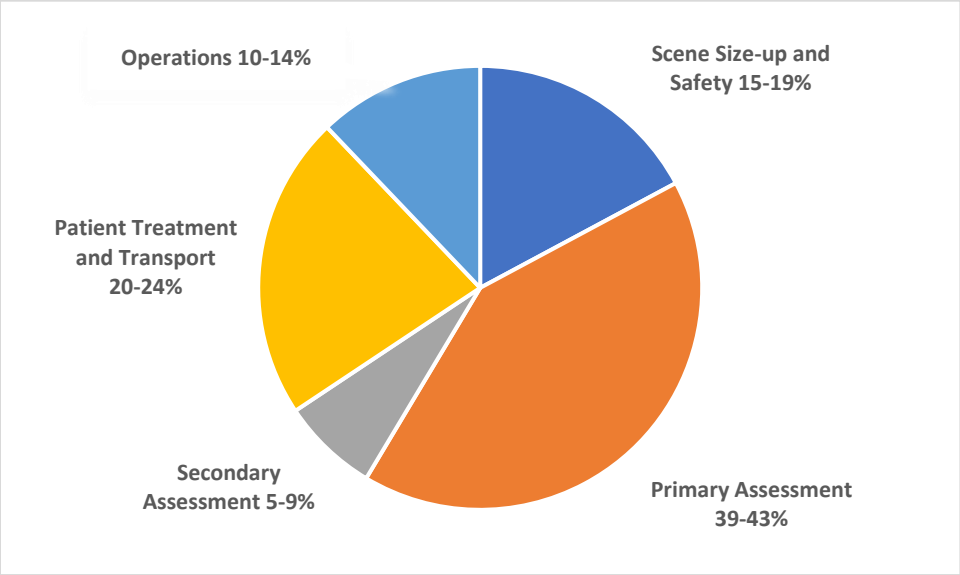
Content Domain	**Related Job Tasks**
Scene Size-up and Safety	Develop a plan of action prior to arrival using all available information to ensure safe and effective operations. Protect self, other responders, patient, public, and the emergency scene from existing and potential hazards. Don appropriate personal protective equipment (PPE) based on known hazards to protect responders from exposure. Investigate the scene to determine potential patients. Triage patients to ensure optimal care. Request appropriate resources based on known hazards and patient conditions to mitigate all facets of the emergency scene.
Primary Assessment	Communicate with the patient and/or bystanders to establish rapport. Determine a general impression of the patient.

	Assess patient's level of consciousness. Assess patient's airway. Assess patient's breathing status. Assess patient's circulation. Determine chief complaint and life threats. Obtain results of patient's baseline vital signs and diagnostic testing. Identify the need for rapid treatment, rapid transport, or additional resources.
Secondary Assessment	Investigate patient's current condition and needs through focused physical assessment, interviewing, and past medical history to develop a continued treatment plan. Investigate previous findings and interventions through reassessment to determine any changes in the patient's condition.
Patient Treatment and Transport	Manage patient's airway, ventilation, and oxygenation. Manage patient's cardiovascular and circulatory system. Manage motion restriction of patient's musculoskeletal system. Administer medication. Manage interventions specific to special populations. Manage patient transport. Communicate pertinent patient information.
Operations	Ensure the equipment is in proper working order. Ensure sufficient inventory of medication and supplies utilized in patient care. Ensure that proper documentation is completed. Ensure the well-being of self and other responders.

Content Distribution for the EMT Certification Examination

The percentage of test questions aligned to each domain was determined through a statistical analysis of data collected through the *2023 Basic Level Practice Analysis* such that tasks performed (and the associated knowledge and skills) were weighted more heavily. The portion of the exam allocated to each content domain is presented below:

Content Domain	Percent of Examination
Scene Size-up and Safety	15–19%
Primary Assessment	39–43%
Secondary Assessment	5–9%
Patient Treatment and Transport	20–24%
Operations	10–14%



Item Development

The examination development process follows multiple steps. Examination items are developed to measure each of the content areas described in the test plan. Every examination item is written by a subject matter expert (SME) in EMS who is trained in item-writing best practices and techniques. These experts also reference each item to industry-standard source materials.

The Examinations team then performs several rounds of internal review of each item for clinical accuracy, alignment with scope of practice, factual correctness, clarity, adherence to style guidelines, and reference completeness. Next, a committee of external SMEs reviews each item for accuracy, correctness, relevance, currency, and proper scope of practice. Items are then reviewed again by internal staff for final confirmation of adherence to all accuracy, quality, and stylistic standards.

The entire process to develop an examination item can take six months or longer from start to finish. Following the reviews, each item is piloted. That is, the item is placed as an unscored item on an examination to collect additional data to ensure the item is psychometrically sound before placement as a scored item in a future examination.

Examination Administration

Computerized Adaptive Testing (CAT)

The EMT Certification Examination is administered through a Computerized Adaptive Testing (CAT) format. CAT examinations are delivered in a different manner than fixed-length exams. After an initial set of items, the computer will begin to administer items that are targeted at or above the candidate's estimated level of ability.

Because the computer delivers items that are more aligned with the candidate's level of understanding, it can determine candidate proficiency in a fewer number of items in many cases. If the computer can make a pass/fail determination in the minimum number of items with 95% confidence, the test administration will end. In some circumstances, it may take longer, and the computer will continue to administer items until the maximum number of items is reached or the maximum time allotted is reached.

Examination Length

Candidates have 2 hours to complete the EMT Certification Examination. The examination is administered in Pearson VUE testing centers or within a home or office setting using Pearson VUE's online proctoring platform, OnVUE. Candidates will be required to answer a minimum of 70 items. The examination may extend to a maximum of 120 items.

Unscored Content

The examination includes 10 unscored pilot items. These items are included in the examination for purposes of collecting data to determine if the quality of the question meets the requirements to move forward on a future examination as a scored item. These items are not identified and will not affect a candidate's score.

Item Types

The EMT Certification Examination includes a variety of item types. All items are scored dichotomously; that is, candidates receive full credit for a correct response. No credit is provided for a partially correct response. These item types are described below:

- **Multiple Choice:** Candidates must select one correct response out of four possible options.
- **Multiple Response:** Candidates must select two or three correct responses out of five or six possible options, respectively. There must be three incorrect responses.

- **Options Table:** Candidates must classify, categorize, or identify several options presented in a table based on certain specified criteria.
- **Build List:** Candidates must position several presented options into the order specified in the item instructions.
- **Drag-and-Drop:** Candidates must position several presented options into certain categories, classifications, or other identifiers as specified in the item instructions.

Sample Items

Sample items for the variety of item types are provided in **Appendix A**.

Passing Standard

The passing standard is the level of knowledge or ability that a competent EMS provider must demonstrate to achieve a passing score on the examination. The passing standard is determined through a standard-setting study, a formal qualitative process in which a trained psychometrician facilitates the collection of data provided by a representative panel of nationally based SMEs from the EMS workforce. The result of this study is a recommended cut score that is provided to the National Registry Board of Directors along with additional data for consideration regarding the impact on the EMS community and the public.

Once the standard is approved by the board of directors, it is uniformly applied to all candidates. The passing standard is reviewed each time new examination specifications are implemented.

Appendix A: Sample Items

Multiple-Choice Item

Which of these receptor sites, beta 1 or beta 2, would albuterol primarily act on, if either?

- ○ A. Beta 1 receptors
- ○ B. Beta 2 receptors
- ○ C. Both receptors
- ○ D. Neither receptor

Multiple-Response Item

A 20-year-old patient responds to verbal stimuli with incoherent moaning after being hit by a car. There are abrasions on the upper and lower extremities. What interventions should the EMT prioritize? Select the two answer options that are correct.

- ☐ A. Dress and bandage wounds.
- ☐ B. Insert an oropharyngeal airway.
- ☐ C. Perform spinal motion restriction.
- ☐ D. Administer supplemental oxygen.
- ☐ E. Provide positive pressure ventilations.

Options Table Item

A 32-year-old patient with dysarthria is found talking to themselves. The patient is continuously looking around and asks the EMT, "Can you see the dragon?" The skin is diaphoretic and hot to the touch. The vital signs are BP 180/98 mmHg, P 160/min, R 20/min, and SpO_2 95% on room air. The BGL is 60 mg/dL. What assessment findings support a differential diagnosis of alcohol intoxication, and what findings support delirium? In the table below, select the two supported diagnoses of alcohol intoxication for the corresponding findings, and select the two supported diagnoses of delirium for the corresponding findings.

Answer Area

	Alcohol intoxication (Select 2 options)	*Delirium (Select 2 options)*
Dysarthria	○	○
Paranoia	○	○
Blood pressure	○	○
Blood glucose level	○	○

Build List Item

A 17-year-old patient is unresponsive. The patient has 2 mm pupils and shallow, irregular respirations. What order of actions should the EMT take to administer intranasal naloxone? Move the options into the **Answer Area** to show the correct order of actions.

Options

- Attach atomizer to syringe
- Confirm proper medication and dose
- Ensure nostrils are clear of obstructions
- Administer a half-dose in each nostril

Answer Area

Order of actions

Drag-and-Drop Item

A 32-year-old patient has multiple gunshot wounds with massive hemorrhage. All external hemorrhage is controlled. What signs and symptoms would indicate that the patient is in compensated or uncompensated shock? Move the stage of shock into the **Answer Area** to show which sign or symptom corresponds with the stage.

Stages of shock
(Move each stage as many times as needed)

- Compensated shock
- Uncompensated shock

Answer Area

Signs or symptoms

- BP 96/52 mmHg
- BP 88/50 mmHg
- Lethargic
- Anxious
- P 64/min
- P 122/min