



EMERGENCY MEDICAL TECHNICIAN

SkillsUSA Championships Technical Standards



PURPOSE

To evaluate each competitor's knowledge and skills required for competent practice within the Emergency Medical Service (EMS) field as an Emergency Medical Technician (EMT) and to recognize outstanding students for clinical excellence and professionalism within the field of EMS.

First, download and review the General Regulations at updates.skillsusa.org.

ELIGIBILITY (TEAM OF TWO)

Open to a team of two (2) active SkillsUSA members from the same local chapter (school) enrolled in career and technical education programs with Emergency Medical Technician (EMT) or related fields as an occupational objective. Each state may send one high school and one college/postsecondary team. A full team must be registered. See General Regulations for more information about substitution and penalty rules.

Student competitors must be enrolled in, or just have completed (within the current membership year) an EMT program in preparation for a career in emergency services (EMS) or other closely related technical, skilled, or service occupation.

CLOTHING REQUIREMENT

Class D: Competition Specific — Blue Attire

- Official SkillsUSA light blue work shirt
- Navy pants
Note: BDU/tactical style pants (e.g., 511 or EMT pants) with a black belt
- Black work safety boot. A protective toe cap is not required. No tennis/running shoes or platform boots allowed.

Note: Safety glasses must have side shields or goggles. (Prescription safety glasses may be used only if they are equipped with side shields. If not, they must be covered with goggles.)

These regulations refer to SkillsUSA Championships Clothing Classifications that are pictured and described at skillsusastore.org. If you have questions about competition uniforms, call the SkillsUSA Store at 888-501-2183.

Note: Competitors must wear their official competition clothing to the competition orientation.

EQUIPMENT AND MATERIALS

1. Supplied by the Technical Committee:
 - a. Tables and chairs
 - b. All written material and blank scratch paper
 - c. Materials for clinical and/or skills stations for selected procedures
 - d. Holding area for competitors
 - e. Clinical scenarios
 - f. Supplies for judges to include pens, scoring rubrics, calculators, and stopwatches
 - g. Two blankets and a pillow
 - h. Event evaluations
 - i. Pens and pencils
 - j. Oxygen cylinders
 - k. Suction device with assorted catheters
 - l. Long spine backboard with 3 straps and/or “Spider straps”
 - m. Complete set of C-collars or adjustable C-collars
 - n. Splinting supplies (e.g., padded board splints, cardboard, traction splint, etc.)
 - o. CPR manikins and AED
 - p. Two-way radio or walkie talkies for simulating calling for additional resources
 - q. Additional equipment provided for competitions will be available for review at orientation.
2. Supplied by the competitor:
 - a. Pencils and pen
 - b. Wristwatch capable of timing in seconds (no smartwatches allowed)
 - c. One complete medical kit per team containing:
 - 1). Personal Protective Equipment to include 25 pairs of disposable medical exam gloves, 2 pairs of safety glasses, 4 surgical masks, and 2 isolation gowns.
 - 2). 1 pack (50 minimum) non-sterile 4X4 bandages
 - 3). 10 sterile 4x4 bandages
 - 4). 2 rolls self-adhering roller bandages (e.g., Cobain)
 - 5). 2 rolls each - 4” and 6” Kling (rolled gauze)
 - 6). 2 rolls each - 4” and 6” Ace wraps
 - 7). 4 triangular bandages / medical cravats
 - 8). 4 rolls - Medical tape (with 2 being 2” wide)

- 9). 2 occlusive dressings, commercial chest seals, or supplies to make these dressings (e.g., precut plastic squares of different sizes; no Tegaderms/transparent waterproof dressings are allowed to be used as occlusive dressings)
- 10). 2 Vaseline gauzes (cannot be used for occlusive dressing)
- 11). 4 abdominal dressings (5" x 9")
- 12). 2 trauma dressings (10" x 30")
- 13). 2 burn sheets (60" x 90")
- 14). 1 trauma shears or medical scissors
- 15). 1 pen light
- 16). 1 stethoscope
- 17). 1 each blood pressure cuffs (large, standard adult, and child size)
- 18). 1 set oral and nasal airways (complete set of each)
- 19). 1 each adult, child and infant bag valve mask (BVM) or 1 adult BVM with adult, child & infant masks
- 20). 1 EMS, CAT, or tactical emergency tourniquet
- 21). 1 each oxygen delivery devices: nasal cannula, non-rebreather mask
- 22). 1 glucometer with strips, lancets, alcohol preps and Band-Aids
- 23). 1 pulse oximeter
- 24). 1 mini sharps container (1" x 6") or small sharps container (6.25" x 2" x 2.25")
- 25). 1 OB kit
- 26). 2 Eye Pads
- d. A current American Heart Association BLS (CPR) certification card. Electronic versions are acceptable.
 - 1). All competitors must also submit online a copy of their certification card. See "Online Submission Requirements" below for guidelines. **Note:** In addition to the online submission requirement competitors must also bring their certification card to orientation.
- e. All competitors must create and submit online a one-page single sided resume. See "Online Submission Requirements" below for guidelines.

Note: All national competitors must also check for competition-specific updates and/or competitor preparation instructions on the SkillsUSA website at updates.skillsusa.org.

PROHIBITED DEVICES

Cellphones, electronic watches and/or other electronic devices not approved by a competition's national technical committee are **NOT** allowed in the competition area. Please follow the guidelines in each technical standard for approved exceptions. Technical committee members may also approve exceptions onsite during the SkillsUSA Championships if deemed appropriate.

Penalties for Prohibited Devices

If a competitor's electronic device makes noise or if the competitor is seen using it at any time during the competition, an official report will be documented for review by the Director of the SkillsUSA Championships. If confirmed that the competitor used the device in a manner which compromised the integrity of the competition, the competitor's scores may be removed.

ONLINE SUBMISSION REQUIREMENTS

All SkillsUSA national competitors must submit their one-page single sided resume online. The deadline and link for online submissions will be published on updates.skillsusa.org. Failure to submit any of the required document(s) listed below by the established deadline will result in a 10-point penalty.

1. One-page single sided resume
2. Copy of your current American Heart Association BLS (CPR) certification

Your submission must be saved as PDF file type using the file name format of “Your Last Name_Your First Name_Resume.” For example, “Amanda Smith” would save the individual PDF submissions file as:

- Smith_Amanda_Resume
- Smith_Amanda_CPR

SCOPE OF THE COMPETITION

The competition will evaluate the competitors’ ability to perform as an Emergency Medical Technician (EMT). The following is a list of materials used in the formation of the competition:

- National Registry Patient Assessment Technical Scope of Practice Standards (TSOPS) from National Highway Traffic Safety Administration
- Current American Heart Association CPR/ECC guidelines
- AAOS, Emergency Care and Transportation of the Sick and Injured 12th Ed. and Pearson, Emergency Care, 14th Ed. (both textbooks provide similar information)

KNOWLEDGE PERFORMANCE

The competition will include a test to assess general knowledge of emergency medical service medical technology. The team members will complete the test separately. Team member’s test scores will be averaged together. Competitors are required to take the SkillsUSA Professional Development Test.

SKILLS PERFORMANCE

The competition will include activities that simulate situations encountered by emergency medical professionals. There will be a clinical scenario, either medical or trauma in nature.

Note: All teams will have the same clinical scenario. The scenario will require the use of critical thinking skills, communication and demonstration of professionalism. There will be four skill stations during which teams will be assessed on specific skills within their scope of practice. While performing procedures, competitors may ask only questions of the judges related to victim physiology. Competitors will be given two (2) minutes to prepare equipment and to confirm knowledge of operation, if unfamiliar. Judges will only provide information as to the safe operation of the device. No demonstration of the equipment’s use will be provided by the judge. In case of a tie, a new scenario will be performed and evaluated to determine the winner.

COMPETITION GUIDELINES

1. Each team must work independently without assistance from instructors, other competitors, and/or observers. Contact with competitors must be coordinated through designated event staff only. Any violation of this may result in the disqualification of the team.
2. A competitor holding area will be established if observation of stations/scenarios presents a competitive advantage. Competitors must remain in the holding area until they complete all required stations.
3. Cellphones, iPads/tablets, smart watches, wearable technology and/or any other electronic device are prohibited from the competition and holding areas. Competitors are allowed to have reading material i.e., books, magazines in the holding area.
4. Only competitors, judges and event staff are allowed in the competition area at any time. Observation is limited to the area designated by the judges or event staff. Any outdoor competition area may only be accessed by judges, competitors and event staff. Any violation of this may result in the disqualification of the competitor.
5. Contact with judges in any way, at any time, without the expressed permission of the competition coordinator is prohibited.

Common Language

“That’s outside your scope of practice, please continue.”

If a competitor provides a treatment or skill that is outside the national EMT scope of practice, the judge will make this statement. If the competitor corrects the action to current standards, a penalty will not be assessed. Example: Student goes to do a glucose check. No penalty, but students must still treat and assess the patient.

“Safety Stop”

If a competitor or judge sees something that is considered unsafe, then this will be called. Depending on the situation, competitors may be deducted points. Example: simulator is about to be dropped during movement to ambulance.

“Tech Stop”

The committee recognizes that not all equipment operates the same. The committee will try to provide hands-on training before the competition. If a competitor believes that the equipment is failing, then the competitor may request this stop. If it is a valid stop, and the competitor can articulate the issue with the equipment, no penalty will occur. If the judge advises, “Please Continue” this means the stop was not valid and normal operation of the equipment with standard knowledge should be able to be operated.

STANDARDS AND COMPETENCIES

MMT 1.0 — Preparatory

- 1.1. Applies knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.

MMT 2.0 — Anatomy and Physiology

- 2.1. Applies knowledge of the anatomy and function of all human systems to the practice of EMS.

MMT 3.0 — Medical Terminology

- 3.1. Uses anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.

MMT 4.0 — Pathophysiology

- 4.1. Applies knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.

MMT 5.0 — Life Span Development

- 5.1. Applies knowledge of life span development to patient assessment and management.

MMT 6.0 — Public Health

- 6.1. Applies knowledge of the principles of public health epidemiology including public health emergencies, public health monitoring, health promotion and illness and injury prevention.

MMT 7.0 — Pharmacology

- 7.1. Applies knowledge of the medications the EMT may administer to a patient during an emergency and chronic or maintenance medications the patient may be taking.

MMT 8.0 — Airway Management, Respiration and Ventilation

- 8.1. Applies knowledge of anatomy and physiology to patient assessment and management to assure a patent airway, adequate mechanical ventilation and respiration for patients of all ages.

MMT 9.0 — Assessment

- 9.1. Applies scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history and reassessment) to guide emergency management.

MMT 10.0 — Medicine

- 10.1. Applies knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

MMT 11.0 — Shock and Resuscitation

- 11.1. Applies knowledge of the causes, pathophysiology and management of shock, respiratory failure or arrest, cardiac failure or arrest, termination of resuscitative efforts and post resuscitation management.

MMT 12.0 — Trauma

- 12.1. Applies knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.

MMT 13.0 — Special Patient Populations

- 13.1. Applies knowledge of growth, development and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs.

MMT 14.0 — EMS Operations

- 14.1. Knowledge of operational roles and responsibilities to ensure patient, public and personnel safety.

Source: National Highway Traffic Safety Administration. National EMS educational standards. www.ems.gov/

MMT 15.0 — SkillsUSA Framework

The SkillsUSA Framework is used to pinpoint the Essential Elements found in Personal Skills, Workplace Skills and Technical Skills Grounded in Academics. Students will be expected to display or explain how they used some of these Essential Elements. For more, visit: www.skillsusa.org/who-we-are/skillsusa-framework/.

COMMITTEE IDENTIFIED ACADEMIC SKILLS

Math Skills

- Use of fractions to solve practical problems.
- Use proportions and ratios to solve.
- Practical problems
- Measure angles.
- Find surface area and perimeter of two-dimensional objectives.

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: <http://www.nctm.org>.

Science Skills

- Plan and conduct a scientific investigation.
- Describe basic needs of organisms.
- Describe and identify physical changes to matter.
- Use knowledge of heat, light and sound energy.
- Use knowledge of temperature scales, heat, and heat transfer.
- Use knowledge of simple machines, compound machines, powered vehicles and restraining devices.

Language Arts Skills

- Provide information in conversation and in group discussion.
- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice.
- Demonstrate use of such nonverbal communication skills as eye contact, posture, and gestures using interviewing techniques to gain and share information.

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.ncte.org/standards.

CONNECTIONS TO NATIONAL STANDARDS

State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards

- Geometry
- Measurement
- Problem-solving

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: www.nctm.org.

Science Standards

- Understands the principles of heredity and related concepts.
- Understands the structure and function of cells and organisms.
- Understands relationships among organisms and their physical environment.
- Understands the sources and properties of energy.
- Understands forces and motion.
- Understands the nature of scientific inquiry.

Language Arts Standards

- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.ncte.org/standards.