



Last updated: February 25th, 2022

Emergency Medical Technician

PLEASE NOTE THE FOLLOWING DIFFERENCES IN HOW THIS EVENT WILL BE RUN AT HOSA CANADA'S FALL LEADERSHIP CONFERENCE (FLC) AND SPRING LEADERSHIP CONFERENCE (SLC):

1. Written test time shortened to 40 minutes (still 50 questions) for both FLC and SLC.
2. Written test will take place online and be open book for both FLC and SLC.
3. Only the written test will be evaluated at FLC.
4. Both Rounds One and Two will take place at SLC. The Round Two skill demonstration at SLC will be **virtual**.
 - a. *If students participate over Zoom, they must have their cameras on for the entire duration of the event and show the judges their surroundings to help us minimize cheating as much as possible.*
 - b. *Each teammate should sign on individually (using their own Zoom account).*
 - c. *Students participating over Zoom have the option of demonstrating their skill on a friend/family member.*
 - d. *Competitors may verbalize their skill demonstration, especially if they have not purchased the materials required for their event (no points will be deducted).*

Emergency Medical Technician

New for 2021 – 2022

JANUARY 24, 2022: FOR ILC 2022 COMPETITORS WILL NOT BE PERFORMING BREATHS ON MANIKINS PER AHA UPDATES. COMPETITORS WILL POSITION THE HEAD & MASK FOR BREATHS AND SIMULATE BY SAYING, "BREATH, BREATH".

Skill step point values have been revised.

Latest edition of both texts have been released.

Event Summary

Emergency Medical Technician provides HOSA members with the opportunity to gain knowledge and skills required for emergency medical care. This competitive event consists of 2 rounds and each team consists of two (2) people. Round One is a written, multiple-choice test and the top scoring teams will advance to Round Two for the skills assessment. This event aims to inspire members to be proactive future health professionals and be equipped with resilience, physical strength and problem-solving skills to provide immediate treatment in emergencies.

Sponsorship This competitive Event is sponsored by the [National Association of Emergency Medical Technicians Foundation](#)



Dress Code Competitors shall wear proper business attire or official HOSA uniform, or attire appropriate to the occupational area, during both rounds. Bonus points will be awarded for [proper dress](#).

General Rules

1. Competitors in this event must be active members of HOSA and in good standing.
2. Secondary and Postsecondary/Collegiate divisions are eligible to compete in this event.
3. Competitors must be familiar with and adhere to the ["General Rules and Regulations of the HOSA Competitive Events Program \(GRR\)."](#)
4. All competitors shall report to the site of the event at the time designated for each round of competition. At ILC, competitor's [photo ID](#) must be presented prior to ALL competition rounds.
5. Competitors should compete in skill events at the highest level of training. An example would be students enrolled in an Emergency Medical Technician course should compete in the Emergency Medical Technician event and NOT in the CERT or CPR/First Aid event.

Official References

6. All official references are used in the development of the written test. The specific references selected for each skill are the National Registry EMT skill sheets.
- [Emergency Care and Transportation of the Sick and Injured. Series Editor: Andrew N. Pollak, MD, FAAOS. Published by Jones & Bartlett Learning. Latest edition.](#)
 - [American Heart Association, Basic Life Support, Latest edition.](#)
 - [Limmer, Daniel. Emergency Care. Published by Prentice Hall, a “Brady” book. Latest edition.](#)
 - NREMT
[See Skill Sheets HERE](#)

Round One Test

7. [Test Instructions:](#) The written test will consist of 50 multiple choice items in a maximum of 60 minutes.
8. **Time Remaining Announcements:** There will be a verbal announcement when there are 30 minutes, 15 minutes, 5 minutes, and 1 minute remaining to complete the test.

9. **Written Test Plan**

Patient Assessment	20%
Basic Life Support.....	20%
Trauma	15%
Medical Emergencies	15%
Pediatrics and Childbirth.....	15%
Environmental Emergencies.....	10%
Special Situations	5%

*NOTE: **Chartered associations** may use a different process for testing, to include but not limited to pre-conference testing, online testing, and testing at a computer. Check with your Chartered Association for the process you will be using.*

10. The average test score from Round One will be used to qualify the team for Round Two.

11. **Sample Test Questions**

1. Which of the following statements best describes the systolic blood pressure?
- A. An amount that is double the diastolic pressure.
 - B. The difference between the resting pressure and the pumping pressure.
 - C. The pressure when the heart is relaxing and allowing blood into the atria.
 - D. The pressure created when the heart contracts and forces blood into the arteries.**

Limmer Page 350/Pollak Page 388

2. If an adult patient is not breathing but has a pulse, the patient should be ventilated at a rate of how many breaths per minute?

- A. 6
- B. 10**
- C. 14
- D. 18

AHA BLS Page 15

3. What is the term for a fracture of the distal radius?
- A. Tommy John
 - B. Supracondylar
 - C. Colles' Fracture**
 - D. Rotation
- Pollak Page 1175

Round Two Skills

12. Round Two is the performance of a selected skill(s). The Round Two skills approved for this event are:

Skill I: Patient Assessment - Trauma
Skill II: Patient Assessment - Medical
Skill III: BVM Ventilation: Apneic Adult Patient
Skill IV-A: Joint Immobilization
Skill IV-B: Long Bone Immobilization
Skill V: Bleeding Control/Shock Management
Skill VI: Cardiac Arrest Management/AED
Skill VII: Oxygen Administration by Non-Rebreather Mask

13. A **twelve (12) minute maximum time limit** has been set for the team demonstration. The selected skill(s) will be presented to competitors as a written scenario at the beginning of the round. The scenario will be the same for each team and will include a challenging component that will require the competitors to apply critical thinking skills. A sample scenario can be found [here](#).
14. Timing will begin when the scenario is presented to the team and competitors will be stopped at the end of the time allowed.
15. The scenario is a secret topic. Competitors MAY NOT discuss or reveal the secret topic until after the event has concluded or will face penalties per [the GRRs](#).
16. *Oxygen Administration:* Oxygen tank assembly is not included in the HOSA EMT event. HOWEVER, an oxygen tank that is ready to use may be available. If the application of oxygen is indicated by the scenario and condition of the patient(s) the competitors should follow proper EMS protocol in initiating and maintaining oxygen therapy.
- If a tank is NOT available and oxygen is indicated, the competitors should verbalize the necessary steps that involve the application of oxygen. Points will be awarded as indicated on the rating sheet used to evaluate all aspects of team's performance, including the use of oxygen therapy.
17. Judges will provide information to competitors as directed by the rating sheets. Competitors may ask questions of the judges while performing skills if the questions relate to patient physiology and will be included in the scenario. For example:
- What are the vital signs?
 - Do I hear breath sounds?
 - Do I have a distal pulse?
 - Is the patient breathing?
 - Are the patient's lips blue?

Final Scoring

18. Teams must earn a score of 70% or higher on the combined skill(s) of the event

(excluding the test) in order to be recognized as an award winner at the ILC.

19. Final rank is determined by adding the averaged round one test score plus round two skill score. In case of a tie, the highest averaged test score will be used to determine final placement.

Competitor Must Provide:

- Two #2 lead pencils with eraser
- Watch with second hand (optional-Round Two only)
- [Photo ID](#)

*** Teams have the option of bringing one kit per person or one kit per team**

- Barrier supplies for each competitor:
 - 5 pairs of non-latex gloves AND 2 masks AND 2 gowns
 - 1 set of goggles or safety glasses per person
- 6 - 10 "4x4" dressings (team's choice)
- self-adhering or roller gauze bandages (team's choice.)
- 4 cravats (used to tie or anchor splints in place – team's choice.)
- Adhesive tape
- Scissors
- Penlight
- 2 occlusive dressing supplies
- 4 abdominal / trauma dressings
- Stethoscope/B/P cuff
- Oral airway kit (sizes 0-6)
- BVM
- Pocket mask and/or other appropriate barrier (face shield, mouth-to-mask device)
- Tourniquet
- Cell phone for simulating call for EMS assistance

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____ Judge's Signature: _____

Skill I: Patient Assessment – Trauma		Possible		Awarded
1.	Practiced body substance isolation precautions throughout skill.	2	0	
2.	Scene Size-up			
	a. Determined the scene/situation is safe.	2	0	
	b. Determined the mechanism of injury/nature of illness.	2	0	
	c. Determined the number of patients.	2	0	
	d. Requested additional EMS assistance if needed.	2	0	
3.	If trauma suspected, competitor verbalized/simulated, "Spinal Immobilization performed at this time".	2	0	
4.	Primary Survey/Resuscitation			
	a. Verbalized general impression of patient.	2	0	
	b. Determined responsiveness/level of consciousness.	2	0	
	c. Determined chief complaint/apparent life threats.	2	0	
5.	Airway			
	a. Opened and assessed airway.	2	0	
	b. Inserted adjunct as indicated.	2	0	
6.	Breathing			
	a. Assessed breathing.	2	0	
	b. Assured adequate ventilation.	2	0	
	c. Initiated appropriate oxygen therapy.	2	0	
	d. Managed any injury which may compromise breathing/ventilation.	2	0	
7.	Circulation			
	a. Checked pulse.	2	0	
	b. Assessed skin (either color, temperature or condition).	2	0	
	c. Assessed for and controlled major bleeding (if present).	2	0	
	d. Initiated shock management (positioned patient properly, conserved body heat).	2	0	
8.	Identified patient priority and made treatment/transport decision (based upon calculated GCS).	2	0	
9.	Obtained baseline vital signs (must include BP, P and R).	2	0	

Items Evaluated	Possible	Awarded
10. Past medical history	2	0
a. Signs and Symptoms		
b. Allergies	2	0
c. Medications	2	0
d. Pertinent Medical History	2	0
e. Last Oral Intake	2	0
f. Events Leading to Present Illness	2	0
SECONDARY ASSESSMENT		
11. Head		
a. Inspects and palpates scalp and ears.	1	0
b. Inspects mouth*, nose* and assesses facial area.	1	0
c. Assesses eyes.	1	0
12. Neck*		
a. Checks position of trachea.	1	0
b. Checks jugular veins.	1	0
c. Palpates cervical spine.	1	0
13. Chest*		
a. Inspects chest.	1	0
b. Palpates chest.	1	0
c. Auscultates chest.	1	0
14. Abdomen/pelvis*		
a. Inspects and palpates abdomen.	1	0
b. Assesses pelvis.	1	0
c. Verbalizes assessment of genitalia/perineum as needed.	1	0
15. Lower Extremities*		
Right leg includes inspection, palpation, and assessment of motor, sensory and distal circulatory function.	1	0
16. Left leg includes inspection, palpation, and assessment of motor, sensory and distal circulatory function.	1	0
17. Upper Extremities*		
Right arm includes inspection, palpation, and assessment of motor, sensory and distal circulatory function.	1	0
18. Left arm includes inspection, palpation, and assessment of motor, sensory and distal circulatory function.	1	0
Items Evaluated	Possible	Awarded

19.	Posterior thorax, lumbar and buttocks*		
	a. Inspects and palpates posterior thorax.	1	0
	b. Inspects and palpates lumbar and buttock (verbalizes) area.	1	0
20.	Manages secondary injuries and wounds appropriately.	2	0
21.	Demonstrates how and when to reassess the patient.	2	0
22.	Interventions (verbalizes proper intervention/treatment.)	2	0
23.	Appropriate verbal and nonverbal communication with patient and other personnel.	2	0
24.	Provided report to Emergency Department including:	2	0
	a. Unit identification		
	b. Patient's age and sex	2	0
	c. Chief complaint	2	0
	d. Brief history of current problem	2	0
	e. Physical findings including: general appearance, vital signs & level of consciousness	2	0
	f. Treatment in progress	2	0
	g. brief description of response to treatment	2	0
	h. Estimated time of arrival	2	0
TOTAL POINTS -- SKILL I		96	
70% Mastery for Skill I = 67.2			

* Award points in areas denoted by * if done, OR if integrated within sequence of Primary Survey/Resuscitation.

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____ Judge's Signature: _____

Skill II: Patient Assessment - Medical		Possible	Awarded
1.	Practiced body substance isolation precautions throughout skill.	2	0
2.	Scene Size-up		
	a. Determined the scene/situation is safe.	2	0
	b. Determined the mechanism of injury/nature of illness.	2	0
	c. Requested additional EMS assistance if necessary.	2	0
	d. Determine the number of patients.	2	0
3.	If trauma suspected, competitor verbalizes/simulates, "Spinal immobilization performed at this time".	2	0
4.	Primary Survey/Resuscitation		
	a. Verbalized general impression of patient.	2	0
	b. Determined responsiveness/level of consciousness (AVPU).	2	0
	c. Determine chief complaint/apparent life threats.	2	0
5.	Assessed airway and breathing		
	a. Assessment.	2	0
	b. Assured adequate ventilation.	2	0
	c. Initiated appropriate oxygen therapy.	2	0
6.	Assesses Circulation		
	a. Assessed for and controls major bleeding.	2	0
	b. Checked pulse.	2	0
	c. Assessed skin (either color, temperature, or condition).	2	0
7.	Identified patient priority/makes treatment/ transport decision.	2	0
History Taking			
8.	History of the present illness		
	a. Onset	2	0
	b. Provokes	2	0
	c. Quality	2	0
	d. Radiation	2	0
	e. Severity	2	0

Items Evaluated-SKILL II	Possible	Awarded
f. Time	2 0	
g. Clarifying questions of associated signs and symptoms related to OPQRST	2 0	
9. Past Medical History	2 0	
a. Allergies		
b. Medications	2 0	
c. Pertinent Medical History	2 0	
d. Last Oral Intake	2 0	
e. Events Leading to Present Illness	2 0	
10. Secondary Assessment (Assesses affected body part/system)		
a. Cardiovascular		
b. Neurological		
c. Integumentary		
d. Reproductive		
e. Pulmonary		
f. Musculoskeletal		
g. GI/GU		
h. Psychological/Social	8 0	
11. Vital Signs	2 0	
a. Pulse		
b. Blood pressure	2 0	
c. Respiratory rate and quality	2 0	
12. Stated field impression of patient.	4 0	
13. Interventions (verbalized proper intervention/treatment).	4 0	
14. Appropriate verbal and nonverbal communication with patient and other personnel.	2 0	
15. Reassessment		
a. Determined how and when to reassess the patient to determine changes in condition.	2 0	
16. Provided report to Emergency Department including:	2 0	
a. Unit identification		
b. Patient's age and sex	2 0	
c. Chief complaint	2 0	
d. Brief history of current problem	2 0	
e. Physical findings including: general appearance, vital signs & level of consciousness	2 0	
f. Treatment in progress	2 0	

Items Evaluated-SKILL II	Possible	Awarded
g. Brief description of response to treatment	2 0	
h. Estimated time of arrival	2 0	
TOTAL POINTS—SKILL II 70% Mastery for Skill II = 68.6	98	

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____

Judge's Signature: _____

Skill III: BVM Ventilation: Apneic Adult Patient	Possible	Awarded
1. Practiced body substance isolation precautions throughout skill.	2 0	
2. Checked responsiveness.	2 0	
3. Requested additional EMS assistance.	2 0	
4. Checked breathing and pulse simultaneously for no more than 10 seconds.	2 0	
<i>Judge states "The patient is unresponsive, apneic and has a weak pulse of 60."</i>		
5. Opened airway properly.	2 0	
<i>Judge states "The mouth is full of secretions and vomitus."</i>		
6. Prepared rigid suction catheter.	1 0	
7. Turned on power to suction device or retrieves manual suction device.	1 0	
8. Inserted rigid suction catheter without applying suction.	1 0	
9. Suctioned the mouth and oropharynx (quickly and adequately).	2 0	
<i>Judge states "The mouth and oropharynx are clear."</i>		
10. Opened the airway manually.	2 0	
11. Verbalized inserted oropharyngeal airway.	2 0	
<i>Judge states "No gag reflex is present and the patient accepts the airway adjunct."</i>		
12. Ventilated the patient immediately using a BVM device unattached to oxygen* <i>*Award this point if competitor elects to ventilate initially with BVM attached to reservoir and oxygen, as long as first ventilation is delivered within 30 seconds.</i>	2 0	
<i>Judge states "Ventilation is being properly performed without difficulty."</i>		
13. Rechecked pulse for no more than 10 seconds.	2 0	
14. Attached the BVM assembly to oxygen @ 15L/min.	2 0	
15. Ventilated the patient adequately:		
a. Proper volume to make chest rise.	2 0	
b. Rate of 10-12/min, but not to exceed 12/min(ventilates 1 x every 5-6 seconds).	2 0	
16. Initiated ventilation within 30 seconds after taking body substance isolation precautions and does not interrupt ventilations for greater than 30 seconds at any time.	2 0	
17. Appropriate verbal and nonverbal communication with patient and other personnel.	2 0	
TOTAL POINTS – SKILL III 70% Mastery for Skill III = 23.1	33	

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____

Judge's Signature: _____

Skill IV-A: Joint Immobilization		Possible	Awarded
1.	Practiced body substance isolation precautions throughout skill.	2	0
2.	Directed application of manual stabilization of the injury.	2	0
3.	Assessed distal motor, sensory and circulatory functions in injured extremity.	2	0
<i>Judge states, "Motor, sensory and circulatory functions are present and normal."</i>			
4.	Selected the proper splinting material.	2	0
5.	Immobilized the site of the injury.	2	0
6.	Immobilized the bone above the injury site.	2	0
7.	Immobilized the bone below the injury site.	2	0
8.	Secured the entire injured extremity.	2	0
9.	Reassessed distal motor, sensory and circulatory functions in the injured extremity.	2	0
<i>Judge states "Motor, sensory and circulatory functions are present and normal."</i>			
10.	Appropriate verbal and nonverbal communication with patient and other personnel.	2	0
TOTAL POINTS -- SKILL IV-A		20	
70% Mastery for Skill IV-A = 14			

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____

Judge's Signature: _____

Skill IV-B: Long Bone Immobilization		Possible	Awarded
1.	Practiced body substance isolation precautions throughout skill.	2	0
2.	Directed immediate application of manual stabilization of the injury.	2	0
3.	Assessed distal motor, sensory and circulatory function in the injured extremity.	2	0
<i>Judge states "Motor, sensory and circulatory functions are present and normal."</i>			
4.	Selected proper splinting material.	2	0
5.	Applied the splint.	2	0
6.	Immobilized the joint above the injured site.	2	0
7.	Immobilized the joint below the injured site.	2	0
8.	Secured the entire injured extremity.	2	0
9.	Immobilized the hand/foot in the position of function.	2	0
10.	Reassessed distal motor, sensory and circulatory functions to the injured extremity.	2	0
<i>Judge states "Motor, sensory and circulatory functions are present and normal."</i>			
11.	Appropriate verbal and nonverbal communication with patient and other personnel.	2	0
TOTAL POINTS - SKILL IV-B		22	
70% Mastery for Skill IV-B = 15.4			

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____

Judge's Signature: _____

Skill V: Bleeding Control/Shock Management	Possible	Awarded
1. Practiced body substance isolation precautions throughout skill.	2 0	
2. Applied direct pressure to the wound.	2 0	
<i>Judge states "The wound continues to bleed."</i>		
3. Applied tourniquet.	2 0	
<i>Judge states "The patient is exhibiting signs and symptoms of hypo-perfusion."</i>		
4. Properly positioned the patient.	2 0	
5. Administered high concentration oxygen.	2 0	
6. Initiated steps to prevent heat loss from the patient.	2 0	
7. Indicated need for immediate transportation.	2 0	
8. Appropriate verbal and nonverbal communication with patient and other personnel.	2 0	
TOTAL POINTS - SKILL V Mastery for Skill V – 11.2	16	

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____

Judge's Signature: _____

Skill VI Cardiac Arrest Management/AED		Possible		Awarded
1.	Practiced body substance isolation precautions throughout skill.	2	0	
2.	Determined the scene/situation is safe.	2	0	
3.	Checked patient responsiveness.	2	0	
4.	Directed assistant (2 nd competitor) to retrieve AED.	2	0	
5.	Requested additional EMS assistance.	2	0	
6.	Checked for breathing and pulse simultaneously for no more than 10 seconds.	2	0	
<i>Judge states "The patient is unresponsive, apneic and pulseless."</i>				
7.	Immediately started chest compressions of adequate depth and rate, allowing the chest to recoil completely.	2	0	
8.	Performed approx. 2 minutes of high quality, 1 rescuer adult CPR	2	0	
	a. Adequate depth and rate.	2	0	
	b. Correct compression-ventilation ratio.	2	0	
	c. Allowed the chest to recoil completely.	2	0	
	d. Adequate volumes for each breath.	2	0	
	e. Minimal interruption of no more than 10 seconds throughout.	2	0	
<i>Note: After approx. 2 minutes or 5 cycles, assess patient and the 2nd rescuer resumes compressions while first rescuer operates the AED.</i>				
9.	Turned on AED power.	2	0	
10.	Followed prompts and correctly attached AED to patient.	2	0	
11.	Directed rescuer to stop CPR and ensured all individuals are clear of the patient during analysis of the rhythm.	2	0	
12.	a. Ensured that all individuals are clear of the patient and verbalizes "All clear."	2	0	
	b. Delivered shock from AED.	2	0	
13.	Immediately directed rescuer to resume chest compressions.	2	0	
14.	Appropriate verbal and nonverbal communication with patient and other personnel.	2	0	

Items Evaluated	Possible	Awarded
15. Verbalized transportation of patient when one of the following are met: 6-9 shocks delivered, 3 consecutive NSI or regains pulse.	2 0	
TOTAL POINTS -- SKILL VI 70% Mastery for Skill VI – 28	40	

EMERGENCY MEDICAL TECHNICIAN

Team #: _____ Section #: _____

Judge's Signature: _____

Note: The tank used for the skill will be empty and steps will be simulated as appropriate.

Skill VII: Oxygen Administration by Non-Rebreather Mask		Possible		Awarded
1.	Practiced body substance isolation precautions throughout skill.	2	0	
2.	Gathered appropriate equipment.	1	0	
3.	Verbalized cracked valve on the oxygen tank.	2	0	
4.	Assembled the regulator to the oxygen tank.	2	0	
5.	Verbalized and simulated opening the oxygen tank valve.	2	0	
6.	Verbalized and simulated checking the oxygen tank pressure.	2	0	
7.	Verbalized and simulated checking for leaks.	2	0	
8.	Attached non-rebreather mask to correct port of regulator.	2	0	
9.	Verbalized and simulated turning on oxygen flow to pre-fill reservoir bag.	2	0	
10.	Verbalized and simulated adjusting regulator to assure oxygen flow rate of at least 10L per minute.	2	0	
11.	Attached mask to patient's face and adjusts to fit snugly.	2	0	
12.	Appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
TOTAL POINTS - SKILL VII		23		
70% Mastery for Skill VII – 16.1				