CPR / First Aid









New for 2023 - 2024

American Red Cross has been added as a resource. For steps in CPR or First Aid that differ between organizations – either American Red Cross or American Heart Association can be used. Teams will tell the judges before beginning a skill with differences which organization protocol they are using.

The roles of the rescuers have been changed to match the resource. Rescuer 1 will initiate CPR.

Rescuer 2 will initiate first aid skill and then assist with CPR.

Skills have been renumbered.

Two new skills, Administer Epinephrine Pen and Administration of Naloxone (Nasal Spray NARCAN) have been added.

Scissors provided by competitor have been clarified to bandage scissors.

Skill events now require attire appropriate to the occupational area be worn for Round 2.

These guidelines are written for ILC. States may modify events or have different event processes and deadlines. Be sure to check with your Local/State advisor (or state website) to determine how the event is implemented for the regional/area or state conference.

Editorial updates have been made. These guidelines are specifically for Michigan HOSA members in preparation for the regional leadership conferences. For more information about regionals, please visit www.michiganhosa.org/regionals.

Event Summary

CPR/First Aid provides members with the opportunity to gain knowledge and skills required for team first aid and basic life support. This competitive event consists of 2 rounds and each team consists of 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 the skills to provide immediate, life-saving actions in the absence of emergency services. At the regional level, all teams will advance to the round two-skill round. The test scores will be combined with the skill scores for final rating

Sponsorship

This competitive event is sponsored by the American Red Cross.



Dress Code

Competitors shall wear proper business attire or official HOSA uniform or attire appropriate to the occupational area during testing. Round 2 skill events require attire appropriate to the occupational area be worn. Bonus points will be awarded for proper dress. At the regional level, teams can wear the occupational appropriate attire to test in, in addition to the skills. They do NOT need to change into business attire to take the test. Bonus points will not be added for proper dress, but judges/event managers will make note if competitors are NOT in proper dress

which could result in overall point deduction.

Note: HOSA follows **American Heart Association (AHA) OR American Red Cross (ARC)** guidelines for healthcare providers. Teams can choose which organization's protocols to follow. Where steps differ between organizations the team will have the option of following either of the steps (see rubrics). Teams will notify judges which organization's protocols they are using before beginning a skill. CPR feedback devices will not be used for ILC competition.

Competitors Must Provide
□ Photo ID
☐ Two #2 lead pencils (not mechanical) with eraser for both rounds
General Equipment to be provided by competitors in a first aid kit or bag:
☐ Cravat (2) (Defined as strips of cloth, triangular bandages folded into strips, roller gauze, or other similar material to tie or anchor splints in place.)
☐ Bandaging materials as selected by competitor (should include sterile gauze squares, roller bandages, trauma dressing and non-stick sterile dressing)
☐ Mouth-to-mask device AND Bag-Mask device (Adult and Infant)
☐ Biohazard bag
☐ Hand sanitizer
☐ Cell phone (for simulating 911 call)
☐ One pair of bandage scissors
☐ Adhesive tape (2)
PPE: 8 pairs of non-latex gloves, 2 sets of goggles or safety glasses
☐ Tourniquet HOSA will provide a tourniquet, OR the competitor has the option of providing their own tourniquet. * Teams have the option of bringing one kit per person or one kit per team - & should ONLY bring the materials listed above.

General Rules

- Competitors in this event must be active members of HOSA and in good standing.
- Eligible Divisions: 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)."
 - A. Per the <u>GRRs</u> and <u>Appendix H</u>, HOSA members may request accommodation in any competitive event. To learn the definition of an accommodation, please read <u>Appendix H</u>. To request accommodation for the International Leadership Conference, <u>submit the request form here</u> by May 15 at midnight EST.
 - B. To request accommodation for any regional/area or state level conferences, submit the request form <u>here</u> by your state published deadline. Accommodations must first be done at state in order to be considered for ILC. Regional accommodations MUST be submitted two weeks prior to your regional conference date. Email <u>Samantha.pohl@mhc.org</u> for questions.
- 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. Event managers will be checking photo IDs at the regional level as well. A digital copy of a photo is appropriate (i.e. picture on phone of photo ID on school portal).
- 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, NOT in the CERT or CPR/First Aid events.

Official References

- 6. All official references are used in the development of the written test and skill rating sheets:
- 7. American Red Cross. Basic Life Support. Latest edition.
- 8. American Red Cross. First Aid/CPR/AED. Latest edition.
- 9. <u>American Heart Association. Basic Life Support. Latest edition.</u>
- 10. American Heart Association. Heartsaver First Aid. Latest edition.
- 11. <u>Simmers, L., Simmers-Nartker, Simmers-Kobelak</u>. <u>DHO: Health Science</u>. Cengage Learning, <u>Latest edition</u>.
- 12. AMA: How to Administer Naloxone

Round One Test

- 13. <u>Test Instructions:</u> The written test will consist of 50 multiple choice items in a maximum of 60 Minutes.
- 14. **Time Remaining Announcements:** There will be NO verbal announcements for time remaining during ILC testing. All ILC testing will be completed in the Testing Center, and competitors are responsible for monitoring their own time. There will be NO verbal announcements for time remaining during regional testing. Students are responsible for monitoring their own time.
- 15. Written Test Plan

 - - General Concepts
 - o BLS/CPR for Adults, Children and Infants
 - o AED for Adults, Children and Infants
 - CPR with Advanced Airway
 - Mouth-to-Mouth/Rescue Breathing
 - Relief of Choking
 - - o Basics
 - Medical Emergencies
 - Injury Emergencies
 - Environmental Emergencies
- 16. The average test score from Round One will be used to qualify the team for Round Two. All teams will advance to the round two skills.
- 17. Sample Test Questions
 - 1. What is the second link in the AHA BLS out-of-hospital adult chain of survival? (AHA BLS pp 6; AHA Heartsaver CPR/AED pp 19)
 - A. High-quality CPR
 - B. Advanced resuscitation
 - C. Post-cardiac arrest care
 - D. Defibrillation
 - Pat finds an unresponsive elderly person at the bottom of a staircase. What type of emergency move would be used to move the patient to further assess them? (ARC pp 157)
 - A. Blanket drag
 - B. Ankle drag

- C. Clothes drag
- D. Two person seat carry
- 3. After a superficial burn has been cooled, what is the next step? (Simmers pp 534)
 - A. Apply a commercial burn ointment, if available
 - B. Remove any clothing that is sticking to the skin
 - C. Cover the burn with a dry, nonstick sterile dressing
 - D. Place an occlusive dressing over the burn and apply a dressing

Round Two Skills

18. Round Two is the performance of a selected skill(s). These skills include one First Aid skill and one BLS CPR Skill. Rescuer 2 initiates the first aid skill while Rescuer 1 initiates the BLS skill. After the first aid patient has been treated, Rescuer 2 will assist Rescuer 1. Highlighted in yellow are the two skills that will be evaluated at the regional level.

BLS for Healthcare Providers

Skill I-A:	Adult BLS/CPR (Rescuer 1 Initiates)
Skill I-B:	Adult BLS/CPR (Rescuer 2 Assists)
Skill II-A:	Adult BLS with AED (Rescuer 1 Initiates)
Skill II-B:	Adult BLS with AED (Rescuer 2 Assists)
Skill III-A:	Infant BLS/CPR (Rescuer 1 Initiates)
Skill III-B:	Infant BLS/CPR (Rescuer 2 Assists)

First Aid Skills - Rescuer 2 Initiated

Skill IV: Severe Bleeding and Shock

Skill V: Choking

Skill VI: Open Fracture and Splinting

Skill VII: Severe Burns

Skill VIII: Heat-Related Emergency
Skill IX: Administer Epinephrine Pen

Skill X: Administer Naloxone (Nasal Spray NARCAN)

- 19. The selected skill(s) will be presented to the 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.
- 20. A **twelve (12) minute maximum time limit** has been set for reviewing the scenario and caring for the patients (skill performance). Timing will begin when the scenario is presented to the team and competitors will be stopped at the end of the time allowed.
- 21. 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.
- 22. 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's condition and will be included in the scenario or judge script.

Final Scoring

- 23. 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.
- 24. 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.

CPR/FIRST AID – Rescuer 1

Section #	Division:	SS	PS/Collegiate
Team #	Judge's Signature _		·

^{*} Rescuer 1 will start this skill, and then Rescuer 2 will provide assistance.

Skill II	-A: Adult BLS with AED – Rescuer 1 Initiates	Pos	sible	Awarded
1.	Verified scene safety and identified which resource being used (ARC or AHA).	2	0	
2.	Opened first aid kit and put on PPE.	2	0	
3. *Judg	Determined unresponsiveness: tapped shoulder, shouted "Are you OK?" e states, "Patient is not responsive."	2	0	
4.	Shout to Rescuer 2 to activate the emergency response system and get AED/defibrillator.	2	0	
5.	Checked to see if the patient has normal breathing and a pulse for no less than 5 and no more than 10 seconds.			
(AHA)	Checked for breathing by scanning the patient's chest for rise and fall. OR OR OR OR OR OR OR OR OR O	2	0	
(ARC)	a. Opened the airway to a past-neutral head position using the head-tilt/chin-lift technique; or, use the modified jaw-thrust maneuver if head, neck or spine injury is suspected. Simultaneously checked for breathing and pulse for no more than 10 seconds.			
* Judo	b. Performed a pulse check by locating the carotid pulse (using 2 or more fingers and sliding the fingers into the groove between the trachea and the muscles at the side of the neck). ge states, "Not breathing" OR "Not breathing normally" AND "No pulse."	2	0	
6.	Initial Chest Compressions (30)			
	a. Positioned self at the patient's side	2	0	
	 Removed bulky clothing from patient's chest or moved bulky clothing out of the way. 	2	0	
	c. Made sure patient is lying face-up on a firm, flat surface.	2	0	
	 Put the heel of one hand on the center of the patient's chest on the lower half of the breastbone. 	2	0	
	e. Put the heel of the other hand on top of the first hand.	2	0	
	f. With arms straight, positioned shoulders directly over hands.	2	0	
	g. Provided chest compressions at a rate of 100 –120/min, delivering 30 compressions in 15 to 18 seconds.	2	0	
	h. Compressions performed at a depth of at least 2 inches (5 cm).	2	0	
	i. Counted compressions aloud.	2	0	
	j. At the end of each compression, allowed the chest recoil.	2	0	
7.	Initial Breaths a. Placed the mouth-to-mask device on the patient's face, using the bridge of the nose as a guide for correct position.	2	0	

SKIII I	I-A: Adult BLS/CPR – Rescuer 1 Initiated (con't)	Poss	sible	Awarded
3.	Sealed mask.			
	a. Used hand closest to the top of the patient's head, placed index finger and thumb along the top edge of the mask.	2	0	
	b. Placed the thumb of other hand along the bottom edge of the mask.	2	0	
	 Placed the remaining fingers of second hand along the bony margin of the jaw and lift the jaw performing a head tilt-chin lift to open the airway. 	2	0	
	 While lifting the jaw, pressed firmly and completely around the outside edge of the mask to seal the pocket mask against the face. 	2	0	
	e. Simulated breath by stating "Breath, Breath". (Verbalized breaths are for 1 second each while observing for chest rise.)	2	0	
).	Continued cycles of 30 compressions and 2 simulated breaths with minimal interruptions until Rescuer 2 arrived with AED. Continued compressions while Rescuer 2 prepared AED.	2	0	
0.	Rescuer 2 – Opened case and powered on AED.	*		
1.	Rescuer 2 cleared patient (communicated clearly to all other rescuers to stop touching patient) and allowed AED to analyze.	*		
12.	Rescuer 1 moved to head to prepare for bag-mask ventilation.	1	0	
3.	Rescuer 2 – If AED advised a shockable rhythm, cleared patient again and delivered shock.	*		
The r	emaining steps are performed by Rescuer 1.			
4.	If no shock is advised, or immediately after any shock is delivered, waited for Rescuer 2 to complete 30 chest compressions before delivering 2 breaths with bag mask.	2	0	
5.	Using the bag mask, positioned self directly above the patient's head.	2	0	
16.	Used the E-C clamp technique			
	a. Performed a head tilt.	2	0	
	b. Placed the mask on the patient's face, using the bridge of the nose as as a guide for correct position.	2	0	
	c. Used the thumb and index finger of one hand to make a "C" on the side of the mask, pressing the edges of the mask to the face.	2	0	
	 Used the remaining fingers to lift the angles of the jaw (3 fingers form an "E"), opened the airway, and pressed the face to the mask. 	2	0	
7.	Squeezed the bag to give each breath after every 30 compressions for 1 second each watching for chest rise.	2	0	
8.	Responded to Rescuer 2's call to switch roles after every five (5) cycles per scenario, taking less than 10 seconds to complete the switch and resume with chest compressions.	2	0	
9. Jud a	Continued two person CPR, performing chest compressions, counting aloud, using a compressions to breaths ratio of 30:2. ge states "EMS has arrived and has taken over care of the patient."	2	0	
20.	Used appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
21.	Gave information about patient to EMS rescuers (judges).	4	0	
22.	Removed gloves properly without touching the outside of the gloves with bare hands.	2	0	
23.	Placed disposable PPE in a biohazard bag.	2	0	
24.	Used alcohol based hand-rub for hand hygiene.	2	0	
ГОТА	AL POINTS – SKILL II-A Mastery for Skill II-A = 53.9	7	7	

CPR/FIRST AID - Rescuer 2

Section #	Division:	SS	PS/Collegiate
Team #	Judge's Signature _		

Note: Variations in AED equipment should be taken into consideration when using this rating tool to evaluate student performance. Adjustments to this rating sheet should support fair and equal treatment of all competitors.

• Rescuer 2 starts with one of the First Aid skills, then moves to assist Rescuer 1 with BLS/CPR following the steps here:

Proce	edure II-B: Adult BLS with AED – Rescuer 2 Assists	Possible	Awarded
1.	After treating first aid patient and changing gloves, arrived to assist Rescuer 1 with the AED.	2 0	
2.	Rescuer 2 – Opened case and powered on AED.	2 0	
3.	Peeled backing away from the AED pads and attached to patient's bare chest following the placement diagrams on the pad.	2 0	
4.	Attached the AED connecting cables if not preconnected.	2 0	
5.	Rescuer 2 cleared patient and allowed AED to analyze.	2 0	
6.	Rescuer 1 moved to head to prepare for bag-mask ventilation.	*	
7.	Rescuer 2 – If AED advised a shockable rhythm, cleared patient again by loudly stating, "all clear" and delivered shock.	2 0	
8.	If no shock is advised, or immediately after any shock is delivered, began chest compressions.		
	a. Positioned self at the patient's side.	2 0	
	 Put the heel of one hand on the center of the patient's chest on the lower half of the breastbone. 	2 0	
	c. Put the heel of the other hand on top of the first hand.	2 0	
	d. With arms straight, positioned shoulders directly over hands.	2 0	
	e. Provided chest compressions at a rate of 100 –120/min, delivering 30 compressions in 15 to 18 seconds.	2 0	
	f. Compressions performed at a depth of at least 2 inches (5 cm).	2 0	
	g. Counted compressions aloud.	2 0	
	h. At the end of each compression, allowed the chest to recoil completely.	2 0	
9.	Called for Rescuer 1 to switch roles after five (5) cycles, taking less than 10 seconds to complete the switch and begin ventilation.	2 0	
10.	Using bag mask, positioned self directly above the patient's head.	2 0	
11.	Used the E-C clamp technique a. Perform a head tilt.	2 0	
	 Placed the mask on the patient's face, using the bridge of the nose as a guide for correct position. 	2 0	
	c. Used the thumb and index finger of one hand to make a "C" on the side of the mask, pressing the edges of the mask to the face.	2 0	
40	d. Used the remaining fingers to lift the angles of the jaw (3 fingers form an "E"), opened the airway, and pressed the face to the mask.	2 0	
12.	Squeezed the bag to give two (2) breaths for one (1) second each after every 30 compressions watching for chest to rise.	2 0	

Skill	Skill II-B: Adult BLS/CPR – Rescuer 2 (con't) – Items Evaluated		sible	Awarded
	Summary Steps		-	
13.	Used appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
14.	Gave information about first aid patient to EMS rescuers (judges).	4	0	
15.	Removed gloves properly without touching the outside of the gloves with bare hands.	2	0	
16.	Placed disposable PPE in a biohazard receptacle.	2	0	
17.	Used alcohol based hand-rub for hand hygiene.	2	0	
	L POINTS – SKILL II-B Mastery for Skill II-B = 37.8		54	

CPR/FIRST AID - Rescuer 2

Section #	Division:	SS	PS/Collegiate
Team #	Judge's Signature		

Note: The patient has an epinephrine pen with them.

Skill I	X: Administer Epinephrine Pen	Pos	sible	Awarded
1.	Verified scene safety.	2	0	
2.	Opened first aid kit and put on PPE.	2	0	
3. Judge	Checked for responsiveness and breathing. e states, "patient is responsive and breathing".	2	0	
4.	Introduced self and asked for permission to help. * Patient consents to treatment.	2	0	
	Quickly assessed the situation. (Asked what happened.) e states, "the patient has been exposed to an allergen and has an epinephrine pen hem and requires help with administration".	2	0	
6.	Responded to Rescuer 1's call for help.	1	0	
7.	Instructed bystander to contact Emergency Medical Services (judge).	2	0	
8.	Looked for medical information jewelry.	2	0	
9.	Obtained epinephrine pen from patient.	2	0	
10.	Read instructions on pen to determine how long injector is held in place.	2	0	
11.	Held the epinephrine pen in fist.	2	0	
12.	Removed safety cap.	2	0	
13.	Held leg firmly in place.	2	0	
14.	Pressed the tip of the injector hard against the side of the patient's thigh, about halfway between the hip and the knee.	2	0	
15.	Held the injector in place for recommended time per manufacturer's instructions (found on side of the ejector).	2	0	
16.	Pulled the pen straight out, making sure they do not touch the end that was pressed to the skin.	2	0	
17.	Instructed patient to rub for 10 seconds; OR rubbed site for 10 seconds if patient is unable to.	2	0	
18.	Verbalized the time of the injection.	2	0	
19. *Judg care o	Assess any change in status. ge states, "symptoms have improved" OR "EMS has arrived and has taken over of the patient."	2	0	
20.	Gave the used autoinjector to the EMS (judge) for proper disposal.	2	0	
21.	Used appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
22.	Gave information about patient to EMS rescuers (judge) including time of injection.	4	0	
23.	Removed gloves properly without touching the outside of the gloves with bare hands.	2	0	

Skill I	X: Administer Epinephrine Pen	Poss	ible	Awarded
24.	Placed disposable PPE in a biohazard receptacle.	2	0	
25.	Used alcohol based hand-rub for hand hygiene.	2	0	
	Assisted Rescuer 1 with BLS ge will continue to evaluate Rescuer 2 using the appropriate rating sheet complete summary steps for first aid patient on the BLS rating sheet.		· · · · · ·	
	AL POINTS – SKILL IX Mastery for Skill IX = 35.7	5	1	