

Pharmacy Science

2023-2024 MICHIGAN HOSA EVENT MODIFICATIONS FOR REGIONAL CONFERENCES!



New for 2023 – 2024

The Patient Screening Form for Skill V has been updated.

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

Pharmacy Science provides members with the opportunity to gain knowledge and skills required in pharmacy-related careers. This competitive event consists of 2 rounds. Round One is a written, multiple-choice test and the top scoring competitors will advance to Round Two for the skills assessment. This event aims to inspire members to be learn more about pharmacy careers and practices. 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 [CVS Health](https://www.cvshealth.com)



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.

Competitors Must Provide:

- A [photo ID](#)
- Two #2 lead pencils (not mechanical) with eraser for both rounds
- Ink pen
- Shoe covers
- Face mask
- Hair cover
- Beard cover (if appropriate)
- Hair Tie to pull back long hair (if appropriate)
- Sterile non-shedding gown with snug-fitting cuffs
- Eye shields or goggles
- Sterile, powder-free, latex free gloves

General Rules

1. Competitors in this event must be active members of HOSA and in good standing.
2. **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 [GRRs](#) and [Appendix H](#), HOSA members may request accommodation in any competitive event. To learn the definition of an accommodation, please read [Appendix H](#). To request accommodation for the International Leadership Conference, [submit the request form here](#) by May 15 at midnight EST.
 - B. To request accommodation for any regional/area or state level conferences, submit the request form [here](#) 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 Samantha.pohl@mhc.org 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 or photo ID on school portal).**

Official References

5. All official references are used in the development of the written test and skill rating sheets.
6. [Johnston, Mike. *The Pharmacy Technician: Foundations and Practices*. Pearson, latest edition.](#)
7. American Academy of Allergy, Asthma, and Immunology. Symptoms and Diagnosis tab (as posted as of September 1, 2023). <https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy>
8. [McCartney, Lisa. *Sterile Compounding and Aseptic Technique: Concepts, Training, and Assessment for Pharmacy Technician*. Paradigm, First Edition.](#)
9. [Moini, Jahangir. *The Pharmacy Technician: A Comprehensive Approach*. Cengage Learning, Latest edition.](#)

Round One Test

10. **Test Instructions:** The written test will consist of 50 multiple choice items in a maximum of 60 minutes.
11. **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.**
12. At the International Leadership Conference, HOSA will provide basic handheld calculators (no graphing calculators) for addition, subtraction, division, multiplication and square root.
13. **USE OF ZERO:** Decimal expressions of less than 1 should be preceded by a zero – “leading zero”. A whole number should never be followed by a decimal point and a zero – “trailing zero”.
14. **Written Test Plan**
- Pharmacy Practice History & Practice Settings 4%
 - Pharmacy Law & Ethics and Safety & Infection Control 10%
 - Pharmacy Terminology & Abbreviations..... 10%
 - Dosage Formulations & Administration Routes 10%
 - Sterile and Non-Sterile Compounding10%
 - Concentration & Dilutions 10%
 - Disorders & Treatments..... 46%
15. The test score from Round One will be used to qualify the competitor for Round Two. **All teams will advance to the round two skills.**

16. Sample Test Questions

1. What U.S. law was passed based upon international treaties intended to stop the recreational use of opium? (Moini pp 45)
 - A. Sherley Amendment of 1912
 - B. Harrison Narcotic Tax Act of 1914**
 - C. Food, Drug, and Insecticide Administration of 1927
 - D. Food, Drug, and Cosmetic Act of 1938

2. The newest forms of insulin have been produced from which source? (Johnston pp 94)
 - A. Animal
 - B. Mineral
 - C. Synthetic
 - D. Genetic engineering**

3. If a patient is to receive 1 ounce of an over-the-counter medication, how many tablespoons should be given? (Moini pp 140)
 - A. 1
 - B. 2**
 - C. 4
 - D. 6

Round Two Skills **Highlighted in yellow are the two skills that will be evaluated at the regional level.**

17. Round Two is the performance of a selected skill(s). The skills approved for this event are:
- | | |
|--|-------------------|
| Skill I: Identifying Equipment (Including name of instrument and purpose or use | 15 minutes |
| Skill II: Verifying Controlled Substance Prescription Content and DEA Number | 6 minutes |
| Skill III: Withdrawing Liquid from a Vial | 15 minutes |
| Skill IV: Compounding an Oral Suspension | 15 minutes |
| Skill V: Patient Screening for Pharmacist Consultation and Services | 4 minutes |
| Skill VI: Filling A Prescription | 5 minutes |

Skill I: Numbered Instruments (15) or photos from list:

Ampules	Cylindrical Graduates	Intravenous System – Roller Clamp	Spatula
Autoclave	Eyewash Station	Laminar Airflow Hood	Suppository Mold – Aluminum Type
Auxiliary Labels	Heat Gun	Liquid Oral Syringe	Suppository Mold – Plastic Type
Beaker Tongs	Hot Plate	Medicine Cup	Syringes
Beakers	Indicator Strip (used for sterilization)	Medicine Dropper	Tablet Mold
Calibrated Spoon	Insulin Syringes	Mortar	Transdermal Patch
Compounding Slabs or Disposable Slabs	Intravenous Injection	Pestle	Tuberculin Syringe
Conical Graduates	Intravenous System – Drip Chamber	Pipettes	Weights
Counting Trays	Intravenous System – IV Solution Bag	Safety Syringes	
Crimper	Intravenous System – Piggyback Device	Sharps Container	

18. Skill I and/or Skill II may be administered with the Round One written test.
19. 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 competitor and will include a challenging component that will require the competitors to apply critical thinking skills. A sample scenario can be found [here](#).
20. Timing will begin when the scenario is presented to the competitors and 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. The competitor must earn a score of 70% or higher on the combined skill(s) of the event (excluding the test and ID equipment) in order to be recognized as an award winner at the ILC.
24. Final rank is determined by adding the round one test score plus round two skill score. In case of a tie, the highest test score will be used to determine the rank.

PHARMACY SCIENCE

Competitor #: _____ Judge's Initials: _____ Total Points (45 possible) _____

Skill I: Identify Equipment and Instruments

(Time: 15 minutes)

	Name of Instrument	Points (1 each for name & spelling)	Purpose or Use	Points (1 point for correct purpose/use)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
TOTAL: ID & Spelling (30 poss)			TOTAL: Purpose (15 possible)	

PHARMACY SCIENCE

Section # _____
 Competitor # _____

Division: _____ SS _____ PS/Collegiate
 Judge's Signature _____

Skill V Patient Screening for Pharmacist Consultation and Services	(Time: 4 minutes)	Possible		Awarded
1.	Greeted patient and introduced self.	1	0	
2.	Provided patient privacy by verbalizing or moving to a private area.	1	0	
3.	Recorded patient's name and date of birth on the blank screening form to verify patient.	2	0	
4.	**Asked patient to respond to all questions (5 total) related to screening (as identified in scenario). - Judge verifies correct questions are asked using screening checklist (student must memorize questions as they will not have access to questions at the event). Questions do not have to be asked in order		-	
	a. Question #1	3	0	
	b. Question #2	3	0	
	c. Question #3	3	0	
	d. Question #4	3	0	
	e. Question #5	3	0	
5.	Demonstrated NO distracting elements of nonverbal communication including lack of eye contact, inappropriate facial expressions and body position such as closed posture.	2	0	
6.	Avoided the use of medical jargon during discussion with patient.	2	0	
7.	Spoke with appropriate volume, pitch, inflection, pronunciation and diction.	2	0	
8.	Actively listened and did not interrupt while patient was speaking.	2	0	
9.	Questioned the patient as needed to ensure that responses were completely understood.	2	0	
10.	Signed the Patient Screening form.	1	0	
11.	Referred patient to the pharmacist for counseling.	4	0	
12.	Handed the completed Patient Screening form to the Pharmacist (judge) indicating the skill is complete.	2	0	
13.	Used appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
TOTAL POINTS -- SKILL V		38		
70% Mastery for Skill V = 26.6				

** Step #4: Competitors should ask the patient the questions outlined in the screening checklists on the following pages 14 -18 that are applicable to the screening (vaccination x3, late refill, or drug allergy) listed in the scenario received at the time of competition. To prepare, competitors should memorize all 5 questions on each of the 5 screening checklists so they can adequately ask the patients the correct questions.

*Definition of Diction – Choice of words especially with regard to correctness, clearness, and effectiveness.

**Definition of Pronunciation – Act or manner of uttering officially.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Contraindications to **Injectable Influenza Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

1. Is this vaccination for yourself or someone else? If for someone else, is the patient to be vaccinated younger than 6 months of age?
2. Is the patient over the age of 65 resulting in the need for CDC recommended higher dose?
3. Is the person to be vaccinated today showing any signs of illness?
4. Does the person to be vaccinated have allergies to any component of the vaccine?
5. Does the person have a severe allergy to chicken eggs?

Reference: Moini, Jahangir. *The Pharmacy Technician: A Comprehensive Approach*. Cengage Learning, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Contraindications to **Injectable Inactivated Poliovirus Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

1. Does the person to be vaccinated have allergies to any component of the vaccine?
2. Is the person to be vaccinated today immune depressed in any way?
3. Does the person to be vaccinated live with anyone who has an immune deficiency disease?
4. Is there a suspected familial immune deficiency?
5. Is there possibility that the person being vaccinated is pregnant?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Contraindications to **Injectable Rubella Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

1. Does the person to be vaccinated have allergies to any component of the vaccine?
2. Is the person to be vaccinated today immunosuppressed?
3. Is the person being vaccinated receiving corticosteroids?
4. Has the person being vaccinated been diagnosed with tuberculosis?
5. Is there possibility that the person being vaccinated is pregnant or attempting to become pregnant?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for **Late Refill**

Promoting compliance with prescribed medication is an important role of the pharmacy staff. If the patient is not taking medication as prescribed the following questions may help determine the cause of noncompliance.

1. How did the prescriber recommend you take this medication?
2. What methods do you use to help remember to take your medication?
3. What side effects have you experienced with the medication?
4. Has this medication helped relieve condition for which it was prescribed?
5. Are there any other reasons you do not take this medication as often as prescribed?

Reference: Johnston, Mike. The Pharmacy Technician: Foundations and Practices. Pearson, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for **Possible Allergic Reaction**

Allergic reactions can be life threatening. Concerns expressed by patient must be investigated. The following questions should be asked to obtain basic needed information.

1. What medication were you taking when you noticed symptoms of concern?
2. Please describe your symptoms.
3. When did your symptoms begin?
4. Were any other medications taken during this time, including over-the-counter drugs?
5. Have you stopped taking the medication?

Reference: American Academy of Allergy, Asthma, and Immunology. Symptoms and Diagnosis tab. <https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy>

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening Form for Pharmacist Consultation and Services

This form is given to the competitor during the event. The competitor completes this form as they ask the patient the 5 questions they have memorized for the selected screening checklist. As the competitor asks each question, the competitor should write a note of which question they asked (such as allergies, side effects, methods, concerns, immunosuppressed, etc.) and how the patient responds in the blank space provided below. After asking the 5 questions, the competitor will sign the form (in the form completed by line) and then return it to the judge (Pharmacist) as the final step in the skill.

Screening Checklist for: _____

Patient Name: _____ Date of Birth: ____/____/____

Questions:

- 1.
- 2.
- 3.
- 4.
- 5.

Form completed by: _____

Date: _____

Form reviewed by: (Judge) _____

Date: _____