

## **Pharmacy Science**

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

1. Written test time shortened to 40 minutes (still 50 questions) at FLC only.
2. Written test will take place online and be open book at FLC only.
3. Only the written test portion of the event will be evaluated at FLC.

**PLEASE NOTE HOSA CANADA'S SPRING LEADERSHIP CONFERENCE (SLC) WILL BE IN-PERSON AND THIS EVENT WILL BE RUN ACCORDING TO THE GUIDELINES IN THE FOLLOWING PAGES, EXCEPT FOR THE FOLLOWING DIFFERENCES:**

1. There will be a verbal announcement when there are 30 minutes and 5 minutes remaining to complete the written test at SLC.  
*\*Please note that NO verbal announcements will be made at the International Leadership Conference (ILC).*
2. Competitors MUST provide their own basic handheld calculators (no scientific or graphing calculators will be allowed) at SLC.  
*\*Please note that basic handheld calculators WILL be provided at the International Leadership Conference (ILC).*

**PLEASE NOTE THE FOLLOWING DIFFERENCES IN HOW THIS EVENT WILL BE RUN AT HOSA CANADA'S SECONDARY/POST-SECONDARY VIRTUAL CONFERENCE:**

4. Written test time shortened to 40 minutes (still 50 questions).
5. Written test will take place online and be open book.
6. Only the written test portion of the event will be evaluated.

**\*\*\*DISCLAIMER: virtual secondary competitor participation in any Competitive Event through the virtual membership is not ranked and not eligible to advance to the International Leadership Conference (ILC)\*\*\***

# Pharmacy Science

## Health Professions Event .....

|   |   |                           |
|---|---|---------------------------|
| <b>Eligible Divisions:</b> Secondary & Postsecondary / Collegiate | <b>Round 1:</b> 50 Q test in 60 minutes | <b>Digital Upload:</b> NO |
| <b>Solo Event:</b> 1 competitor                                   | <b>Round 2:</b> Skill Demonstration     |                           |

 **New for 2025 – 2026**  
Editorial updates have been made.

### Event Summary

Pharmacy Science enables members to acquire the knowledge and skills necessary for careers in pharmacy. This competitive event consists of two rounds. Round One is a written, multiple-choice test, and the top-scoring competitors advance to Round Two for the skills assessment. This event aims to inspire members to learn more about the field of pharmacy, including careers and practices.

### Sponsorship

HOSA-Future Health Professionals appreciates the sponsorship of this event by [CVS Health](#).



### Dress Code

Bonus points will be awarded for [proper dress](#).

Round 1: Proper business attire, official HOSA uniform, or attire appropriate to the occupational area

Round 2: Attire appropriate to the occupational area

### Competitors Must Provide:

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

HOSA Conference Staff will provide equipment and supplies as listed in [Appendix I](#).

### General Rules

1. Competitors must be familiar with and adhere to the [General Rules and Regulations](#).

### Official References

2. The references below are used in the development of the test questions and skill rating sheets.
  - a. [Johnston, Mike. \*The Pharmacy Technician: Foundations and Practices\*. Pearson, latest edition.](#)
  - b. [American Academy of Allergy, Asthma, and Immunology. \(Symptoms and Diagnosis tab\) \(as posted as of September 1, 2025\).](#)
  - c. [McCartney, Lisa. \*Sterile Compounding and Aseptic Technique: Concepts, Training, and Assessment for Pharmacy Technician\*. Paradigm, First Edition.](#)
  - d. [Moini, Jahangir. \*The Pharmacy Technician: A Comprehensive Approach\*. Cengage Learning, Latest edition.](#)

## Round One Test

3. [Test Instructions](#): The written test will consist of 50 multiple-choice items in a maximum of 60 minutes.
4. **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.
5. At the International Leadership Conference, HOSA will provide basic handheld calculators (no graphing calculators) for addition, subtraction, division, multiplication, and square root.
6. **USE OF ZERO**: Decimal expressions of less than 1 should be preceded by a zero—a “leading zero.” A whole number should never be followed by a decimal point and a zero – “trailing zero.”

## 7. Written Test Plan

The test plan for Pharmacy Science is:

- 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 Compounding - 10%
- Concentration & Dilutions - 10%
- Disorders & Treatments - 46%

## 8. 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

9. The top competitors from Round One will advance to Round Two. The number of advancing competitors will be determined by the scores obtained in Round One and the space and time available for Round Two. Round Two finalists will be announced on-site at ILC per the conference agenda.
10. Round Two is a selected skill(s) performance. The skills approved for this event are:

|   |            |
|---|------------|
| Skill I: Identifying Equipment ( <i>Including name of instrument and purpose or use</i> ) | 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 VII: Aseptic Garbing, Hand Washing and Gloving                                      | 10 minutes |

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

|                                       |  |                                   |                                  |
|---------------------------------------|--|-----------------------------------|----------------------------------|
| Ampules                               | Graduated Cylinders                      | 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                  |                                  |

11. Skill I and/or Skill II may be administered with the Round One written test.
12. 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. Some scenarios may involve the combination of multiple skill sheets. An example would be competitors would not need to identify the patient twice. A sample scenario is available [here](#).
13. 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](#).
14. Judges will provide competitors with information as directed on the rating sheets. Competitors may ask questions of the judges while performing skills, if the questions relate to the patient's condition and will be included in the scenario or the judge script.

**Final Scoring**

15. The competitor must earn a score of 70% or higher on the combined skill(s) of the event (excluding the test and ID equipment) to be recognized as an award winner at the ILC.
16. The final rank is determined by adding the round one test score plus the round two skill score. In case of a tie, the highest test score will be used to determine the rank.

**Future Opportunities**

Graduating from high school or completing your postsecondary/collegiate program does not mean your HOSA journey has to end. As a HOSA member, you are eligible to become a HOSA Lifetime Alumni Member - a free and valuable opportunity to remain connected, give back, and help to shape the future of the organization. Learn more and sign up at [hosa.org/alumni](https://hosa.org/alumni).

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_ Judge's Initials: \_\_\_\_\_ Total Points (45 poss.) \_\_\_\_\_

**Skill I: Identify Equipment (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  |                    |                                     |                                  |  |
| <b>TOTAL: ID &amp; Spelling (30 poss)</b> |                    |                                     | <b>TOTAL: Purpose (15 poss.)</b> |  |

# PHARMACY SCIENCE

## **Skill II: Verifying the Content of a Controlled Substance Prescription and DEA Number (6 minutes)**

\*\*\* Via the event scenario, the competitor will be given a prescription. Each competitor will also be given a Prescription Verification Form, which acts as the rating sheet (page 6 of the guidelines). The prescription in the scenario will have missing information. Competitors must know all the prescription components (below) to identify which components are missing. The judges will score the Prescription Verification Form using the points indicated.

When verifying a Controlled Substance Prescription with DEA Number, the below list of items must all be verified.

1. Patient Information
  - a. Name
  - b. Address
  - c. Date of Birth
2. Prescriber Information
  - a. Name
  - b. Address
  - c. Telephone Number
  - d. License Number
3. DEA Number
  - a. Verified the second letter corresponds to the first letter of the provider's last name
  - b. Added the first, third, and fifth digits of the DEA number.
  - c. Added the second, fourth, and sixth digits of the DEA number. Double the sum.
  - d. Added the sum of b and c.
  - e. Verified that the last digit from step d matches the last digit of the DEA number.
4. When prescribed
  - a. Month
  - b. Day
  - c. Year
5. Drug name and strength
6. Dose and quantity
7. Route of administration
8. Directions (signature or "Sig")
9. Number of refills authorized
10. Product selection was permitted
11. Prescriber's signature
12. No dangerous abbreviations, acronyms, or symbols are used from the Joint Commission's "Minimum" Do Not Use list and the Joint Commission's "Recommended" Do Not Use List.

# PHARMACY SCIENCE

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

## Skill II: Verifying the Content of a Controlled Substance Prescription and DEA Number (6 minutes)

### Prescription Verification Form – Rating Sheet

*\*Name brand and generic names will be used in the scenarios.*

Please list the 5 components missing from the prescription given to you (below):

1. \_\_\_\_\_ (3 points)
2. \_\_\_\_\_ (3 points)
3. \_\_\_\_\_ (3 points)
4. \_\_\_\_\_ (3 points)
5. \_\_\_\_\_ (3 points)

Write the DEA Number listed on prescription: \_\_\_\_\_

Determine the validity of the DEA Number by showing your work in **five** steps :

1. \_\_\_\_\_ (1 point)
2. \_\_\_\_\_ (1 point)
3. \_\_\_\_\_ (1 point)
4. \_\_\_\_\_ (1 point)
5. \_\_\_\_\_ (1 point)

Is the DEA number valid? \_\_\_\_\_ Yes or No (3 points)

Are there any dangerous abbreviations, acronyms, or symbols used from the Joint Commission's "Minimum" Do Not Use list and the Joint Commission's "Recommended" Do Not Use List? If yes, **list below**. If no, **write NO** (3 points)

If the prescription lacks the required elements, what steps would you take? \_\_\_\_\_  
\_\_\_\_\_ (2 points)

**Total Points Possible: 28**

**Total Points Awarded: \_\_\_\_\_**

**70% Mastery for Skill II: 19.6**

# PHARMACY SCIENCE

Section # \_\_\_\_\_ Division: \_\_\_\_\_ SS \_\_\_\_\_ PS/Collegiate

Competitor # \_\_\_\_\_ Judge's Signature \_\_\_\_\_

*\*Name brand OR generic names will be used in the scenarios.*

| <b>Skill III: Withdrawing Liquid from a Vial (Time: 15 minutes)</b> |  | <b>Possible</b> |   | <b>Awarded</b> |
|---|--|-----------------|---|----------------|
| 1.  | Obtained the medication order.   | 1               | 0 |                |
| 2.  | Obtained needed supplies and placed in transport vehicle.  | 1               | 0 |                |
| 3.  | Performed calculation based on scenario.   | 4               | 0 |                |
| 4.  | Verbalized: "I have donned PPE and washed my hands, and donned sterile gloves."  | 2               | 0 |                |
| <b>CLEAN ROOM PROCEDURE</b>   |  | -               |   |                |
| 5.  | Verbalized cleaning the hood - competitor included which surface cleaned with what supplies.   | 2               | 0 |                |
| 6.  | Placed all supply items for the skill into the outer six-inch staging area of the hood.  | 1               | 0 |                |
| 7.  | Placed the vial within the Direct Compounding Area (DCA).  | 1               | 0 |                |
| 8.  | Removed the flip-top cap and placed it in the discard pile.  | 1               | 0 |                |
| 9.  | Opened an alcohol swab within the Direct Compounding Area and placed the wrapper in the discard pile.  | 1               | 0 |                |
| 10.   | Placed the used swab on the hood's work surface within the DCA. Swabbed the top of the medicine vial and discarded the used swab in the discard pile.                  | 2               | 0 |                |
| 11.   | Swabbed the top of the medicine vial and discarded the used swab in the discard pile.  | 1               | 0 |                |
| 12.   | Aseptically attached a needle to the syringe and gently screwed the needle hub onto the syringe tip.   | 2               | 0 |                |
| 13.   | Pulled the plunger back on the syringe to slightly less than the amount needed to be drawn up.   | 1               | 0 |                |
| 14.   | Removed the needle cap and placed it onto the alcohol swab.  | 2               | 0 |                |
| 15.   | Used the thumb and forefinger of the nondominant hand, to stabilize the vial against the hood's work surface.  | 1               | 0 |                |
| 16.   | Placed the needle tip bevel up and inserted at a 45-degree angle through the stopper.  | 1               | 0 |                |
| 17.   | Gently pushed the air from the syringe into the vial.  | 1               | 0 |                |
| 18.   | Used nondominant hand holding the vial and the dominant hand to maintain the needle in the vial while inverting the vial so that needle and syringe is below the vial. | 1               | 0 |                |
| 19.   | Allowed fluid to move from the vial to syringe. If needed, pulled back on the plunger until the desired amount is withdrawn.   | 1               | 0 |                |
| 20.   | Checked syringe contents for bubbles and taped syringe to move air bubbles to hub, then push bubbles into the vial.  | 2               | 0 |                |
| 21.   | Withdrew needle from vial.   | 1               | 0 |                |
| 22.   | Carefully recapped needle.   | 1               | 0 |                |

| <b>Skill III: Withdrawing Liquid from a Vial (cont'd)</b> |   | <b>Possible</b> |   | <b>Awarded</b> |
|---|---|-----------------|---|----------------|
| 23.   | <b><i>Judge verified the correct medication and amount of liquid was withdrawn.</i></b>               | 4               | 0 |                |
| 24.   | Labeled the syringe and placed the completed syringe and other supply items on the transport vehicle. | 2               | 0 |                |
| 25.   | Discarded waste items in proper waste containers.   | 2               | 0 |                |
| 26.   | Returned to anteroom and returned unused supply items to proper storage.                              | 1               | 0 |                |
| 27.   | Verbalized removing all PPE in anteroom.  | 2               | 0 |                |
| 28.   | Washed hands or used alcohol based hand-rub for hand hygiene.   | 1               | 0 |                |
| <b>TOTAL POINTS – SKILL III</b>                           |   | <b>43</b>       |   |                |
| <b>70% Mastery for Skill III = 30.1</b>                   |   |                 |   |                |

# PHARMACY SCIENCE

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

*\*Name brand OR generic names will be used in the scenarios.*

| <b>Skill IV: COMPOUNDING AN ORAL SUSPENSION (Time: 15 minutes)</b> |   | <b>Possible</b> |   | <b>Awarded</b> |
|--|---|-----------------|---|----------------|
| 1.   | Obtained the completed recipe or completed formula via scenario using the Master Formula sheet.   | 1               | 0 |                |
| 2.   | Checked the amount per dose and the total volume needed to be prepared with the pharmacist (judge).   | 2               | 0 |                |
| 3.   | Used Master Formula sheet to obtain needed medication:<br>a. obtained the correct number of tablets needed.   | 2               | 0 |                |
|  | b. verified with pharmacist (judge) both the drug product selected and the number of tablets needed for compounding, based on the Master Formula Sheet<br><b>* Judge verified accuracy. Competitor proceeds either way. Points only awarded if the correct number of tablets were obtained.</b> | 2               | 0 |                |
| 4.   | Obtained needed equipment   | 1               | 0 |                |
| 5.   | Washed hands or used alcohol based hand-rub for hand hygiene.   | 2               | 0 |                |
| 6.   | Donned or verbalized donning personal protective equipment: hair cover, face mask, gloves, and gown.  | 2               | 0 |                |
| 7.   | Crushed or reduced to a fine powder by using mortar and pestle.   | 1               | 0 |                |
| 8.   | Added a small amount of suspending vehicle to wet the powder, and then mixed (levigated) the powder with the liquid until a smooth paste is formed.   | 1               | 0 |                |
| 9.   | Continued to add suspending vehicle until product is liquid enough to transfer to a graduated cylinder  | 1               | 0 |                |
| 10.  | Poured the liquid into a graduated cylinder.  | 1               | 0 |                |
| 11.  | Rinsed mortar several times with small amounts of suspending vehicle and added to the product in the graduated cylinder.  | 1               | 0 |                |
| 12.  | Added suspending vehicle to bring product up to the required final volume and verified the amount of suspension at eye level.   | 2               | 0 |                |
| 13.  | Poured the compounded suspension into the most appropriately sized amber oval medication bottle, sealed bottle and shook well.  | 1               | 0 |                |
| 14.  | Selected the appropriate label from those provided and affixed to the medication bottle.<br><b>*Judge verified accuracy. Points awarded only if the correct label(s) was selected and affixed.</b>  | 4               | 0 |                |
| 15.  | Selected the appropriate auxiliary label(s) from those provided and affixed to the medication bottle.<br><b>*Judge verified accuracy. Points only awarded if the correct label was selected and affixed.</b>  | 4               | 0 |                |
| 16.  | Cleaned the compounding area and equipment using 70% isopropyl alcohol and wipes and returned equipment to proper place.  | 2               | 0 |                |
| 17.  | Removed and disposed of PPE.  | 2               | 0 |                |
| 18.  | Washed hands or used alcohol based hand-rub for hand hygiene.   | 2               | 0 |                |
| <b>TOTAL POINTS - SKILL IV</b>                                     |   | <b>34</b>       |   |                |
| <b>70% Mastery for Skill IV = 23.8</b>                             |   |                 |   |                |

*\*Compounding directions were obtained from [nationwidechildrens.org](http://nationwidechildrens.org) .*

# Skill IV - MASTER FORMULA SHEET: NON-STERILE COMPOUNDING

*\*This form will be completed by HOSA staff before the event and will be given to competitors with the scenario.*

PRODUCT: \_\_\_\_\_ DATE PREPARED: \_\_\_\_\_

FINAL PRODUCT CHECKED BY: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

| Ingredient | Manufacturer | Lot # | MFR Expiration Date | Formula Quantity Required | Quantity Used | Prepared By | Checked By |
|------------|--------------|-------|---------------------|---------------------------|---------------|-------------|------------|
|            |              |       |                     |                           |               |             |            |
|            |              |       |                     |                           |               |             |            |
|            |              |       |                     |                           |               |             |            |
|            |              |       |                     |                           |               |             |            |

| Equipment | Prescription Label |
|-----------|--------------------|
|           |                    |
|           | Auxiliary Label    |
|           |                    |

**Compounding Directions:** (finished suspension will be 60mL or greater)

|  |                                |
|--|--------------------------------|
|  | <b><u>Date Prepared:</u></b>   |
|  | <b><u>Expiration Date:</u></b> |
|  | <b><u>Stability:</u></b>       |

# PHARMACY SCIENCE

Section # \_\_\_\_\_  
 Competitor # \_\_\_\_\_

Division: \_\_\_\_\_ SS \_\_\_\_\_ PS/Collegiate  
 Judge's Signature \_\_\_\_\_

| Skill V Patient Screening for Pharmacist Consultation and Services<br>(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. <b>**Asked patient to respond to all questions (5 total) related to screening (as identified in scenario).<br/>           - Judge verifies correct questions are asked using screening checklist (students must memorize questions as they will not have access to questions at the event). Questions do not have to be asked in order</b> | -         |         |
| 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       |         |
| <b>TOTAL POINTS -- SKILL V<br/>           70% Mastery for Skill V = 26.6</b>  | <b>38</b> |         |

**\*\* Step #4:** Competitors should ask the patient the questions outlined in the screening checklists on the following pages 14 -18 that apply 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.

# PHARMACY SCIENCE

## Skill V Patient Screening for Pharmacist Consultation and Services

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### 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 does not necessarily mean the vaccination will not be given. Additional information will be required.

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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

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### 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 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 a 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

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### 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~~ Answering “yes” to any of the following questions 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 a 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

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### 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.

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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 conditions 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

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### Screening Checklist for **Possible Allergic Reaction**

Allergic reactions can be life-threatening. The patient's concerns must be investigated. The following questions should be asked to obtain the basic information needed.

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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

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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 note 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: \_\_\_\_/\_\_\_\_/\_\_\_\_

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Questions:

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

Form completed by: \_\_\_\_\_

Date: \_\_\_\_\_

Form reviewed by: (Judge) \_\_\_\_\_

Date: \_\_\_\_\_

# PHARMACY SCIENCE

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

*\*Name brand OR generic names will be used in the scenarios.*

| <b>Skill VI: Filling a Prescription</b> |  | <b>(Time: 5 minutes)</b> |   | <b>Possible</b> | <b>Awarded</b> |
|---|--|--------------------------|---|-----------------|----------------|
| 1.                                      | Obtained prescription.   | 1                        | 0 |                 |                |
| 2.                                      | Reviewed the prescription for legality and correctness.  |                          |   |                 |                |
|   | a. Verified the patient name on the prescription by asking the patient.  | 2                        | 0 |                 |                |
|   | b. the date for the presented prescription was written within the past year.                                   | 2                        | 0 |                 |                |
|   | c. Verified address of the patient.  | 1                        | 0 |                 |                |
|   | d. Date of birth verified  | 1                        | 0 |                 |                |
| 3.                                      | Reviewed the original medication order with the pharmacist (judge):  |                          |   |                 |                |
|   | a. correct dosage form is included on the prescription   | 1                        | 0 |                 |                |
|   | b. correct strength is included on the prescription  | 1                        | 0 |                 |                |
| 4.                                      | Determined if generic substitution is allowed based on the prescription  | 1                        | 0 |                 |                |
| 5.                                      | Washed hands or used alcohol-based hand sanitizer for hand hygiene.  | 2                        | 0 |                 |                |
| 6.                                      | Obtained the correct medication to fill the prescription.  | 2                        | 0 |                 |                |
| 7.                                      | Checked the medication expiration date   | 2                        | 0 |                 |                |
| 8.                                      | Calculated the number of tablets or capsules to dispense based on prescription.                                | 4                        | 0 |                 |                |
| 9.                                      | Used the counting tray and spatula to count needed number of tablets or capsules for the current prescription. | 4                        | 0 |                 |                |
| 10.                                     | Recounted to ensure the correct number will be dispensed.  | 2                        | 0 |                 |                |
| 11.                                     | Obtained the most appropriate container (type and shape) for the prescription from those supplied.             | 1                        | 0 |                 |                |
| 12.                                     | Obtained the correct label, rechecking the directions and drug strength.                                       | 4                        | 0 |                 |                |
| 13.                                     | Affixed auxiliary labels if indicated such as take with meals, shake well, etc.                                | 2                        | 0 |                 |                |
| 14.                                     | Submitted to pharmacist (judge) for final check.<br><b>*Judge verified accuracy of final product</b>           | 4                        | 0 |                 |                |

| <b>Skill VI: Filling a Prescription (cont'd)</b>  | <b>Possible</b> |   | <b>Awarded</b> |
|---|-----------------|---|----------------|
| 15. Avoided contamination by not touching medication directly throughout filling process. | 2               | 0 |                |
| 16. Cleaned counting tray and spatula with an alcohol swab.                               | 2               | 0 |                |
| 17. Returned all equipment to appropriate place.  | 2               | 0 |                |
| 18. Washed hands or used alcohol-based hand sanitizer for hand hygiene.                   | 2               | 0 |                |
| 19. Used appropriate verbal and nonverbal communication with patient and other personnel. | 2               | 0 |                |
| <b>TOTAL POINTS - SKILL VI</b><br><b>70% Mastery for Skill VI = 32.9</b>                  | <b>47</b>       |   |                |

# PHARMACY SCIENCE

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

| <b>Skill VII: Aseptic Garbing, Hand Washing, &amp; Gloving<br/>(Time: 10 minutes)</b>  | <b>Possible</b> | <b>Awarded</b> |
|--|-----------------|----------------|
| 1. Removed any outer garments and jewelry.   | 2 0             |                |
| 2. Obtained needed supplies.   | 1 0             |                |
| 3. Cleansed hands with sterile, foamed 70% IPA by holding can so that tip is down into the palm of opposite hand and coating palms, back of hands, and each finger and allow to dry. | 2 0             |                |
| 4. Donned shoe covers one at a time completely covering shoe.  | 2 0             |                |
| 5. Reapplied sterile, foamed 70% IPA to hands and allowed to dry.  | 2 0             |                |
| 6. Gathered or tied loose hair back and put on the hair cover while completely covering all of the hair.   | 2 0             |                |
| 7. Reapplied sterile, foamed 70% IPA to hands & allowed to dry.  | 2 0             |                |
| 8. Donned a face mask by positioning the mask securely over nose, mouth and chin. If have facial hair, donned a beard cover.   | 2 0             |                |
| 9. TO SINK FOR ASEPTIC HAND WASHING:<br>a. Squeezed surgical scrub sponge/brush several times to activate soap suds.   | 2 0             |                |
| b. Opened the packet removing the sterile sponge/brush and held in dominant hand.  | 2 0             |                |
| c. Used the other hand to dispose of wrapper in waste container.   | 2 0             |                |
| d. Pressed the foot pedals if present to begin flow of water.<br><b>*IF NO FOOT PEDALS ARE AVAILABLE ASK JUDGE TO TURN ON THE WATER.</b>   | 2 0             |                |
| e. When water was warm, wet hands and arms.  | 2 0             |                |
| 10. Used the nail pick to clean under each fingernail while still holding the scrub sponge/brush. When completed disposed of pick in wastebasket.                                    | 2 0             |                |
| 11. Applied a small amount of water to the scrub sponge/brush.   | 2 0             |                |
| 12. Used the brush side of the sterile scrub sponge/ brush under the fingernails of left hand moving from thumb to pinkie.   | 2 0             |                |
| 13. Repeated step #12 on the right hand.   | 2 0             |                |

| <b>Skill VII: Aseptic Garbing, Hand Washing, &amp; Gloving (cont'd)</b>                |  | <b>Possible</b> |   | <b>Awarded</b> |
|--|--|-----------------|---|----------------|
| 14.  | Used the sponge side to clean each of the four surfaces (top, side, bottom, side) and webbing between beginning with thumb and repeating for each finger on left side. | 2               | 0 |                |
| 15.  | Repeated step #14 on the right hand.   | 2               | 0 |                |
| 16.  | Used the sponge to clean the palm of the left hand.  | 2               | 0 |                |
| 17.  | Repeated step #16 on the right hand.   | 2               | 0 |                |
| 18.  | Cleaned the left forearm in a circular pattern around the arm from wrist to elbow.   | 2               | 0 |                |
| 19.  | Repeated step #18 on the right side.   | 2               | 0 |                |
| 20.  | Disposed of scrub sponge/brush without touching waste container or contents.   | 2               | 0 |                |
| 21.  | Rinsed the left hand and forearm holding your arm with fingers pointed up and rinsing from fingers to elbow.   | 2               | 0 |                |
| 22.  | Repeated step #21 on right hand.   | 2               | 0 |                |
| <b>*Foot Pedal released OR<br/>Judge turns off water when handwashing is complete.</b> |  |                 | - |                |
| 23.  | Used an aseptic, lint-free paper towel to dry both hands moving from fingers toward the elbow.   | 2               | 0 |                |
| 24.  | Disposed of paper towel in waste container.  | 2               | 0 |                |
| 25.  | Opened the sterile gown.   | 2               | 0 |                |
| 26.  | <b>DONNED STERILE GOWN</b>   |                 |   |                |
|  | a. Inserted one arm into open sleeve and pulled it up on shoulder and repeated on other sleeve.  | 2               | 0 |                |
|  | b. Secured the gown at the neck and at the waist.  | 2               | 0 |                |
| 27.  | Sterilized hands with sterile, foamed 70% IPA.   | 2               | 0 |                |
| 28.  | Opened sterile gloves and placed on clean surface.   | 2               | 0 |                |
| 29.  | Placed the left glove on the left hand by grasping the inner part of the ff with the right hand & pulled up onto left hand.  | 2               | 0 |                |
| 30.  | Repeated gloving process on right hand.<br><b>*Judge states "skill is completed."</b>  | 2               | 0 |                |
| 31.  | <b>Removal of PPE</b>  |                 |   |                |
|  | a. Grasped cuff of one glove and pulled glove down & off hand.   | 2               | 0 |                |
|  | b. While grasping removed glove in gloved hand, grasped the cuff & pulled off the glove of the other hand.   | 2               | 0 |                |
|  | c. Disposed of glove bundle in waste container.  | 2               | 0 |                |
|  | d. Untied the gown and removed by pulling at shoulders turning the gown inside out and placed in a waste container.  | 2               | 0 |                |
|  | e. Removed face mask, hair cover, and shoe covers and discarded in waste container.  | 2               | 0 |                |
| 32.  | Washed hands or used alcohol-based handrub for hand hygiene.   | 2               | 0 |                |
| <b>TOTAL POINTS - SKILL VII</b>  |  | <b>81</b>       |   |                |
| <b>70% Mastery for Skill VII = 56.7</b>  |  |                 |   |                |