

New for 2019-2020

Competitors are no longer required to show event guidelines. Time remaining announcements have been added to the test. Editorial updates and clarifications have been made to guidelines. Scholarship information has been added to the guidelines. The designation of "Knowledge Test" has been removed from the event name.

Purpose To encourage HOSA members to improve their ability to identify, spell, define and apply the principles and science common to pharmacology in the health community.

Description The event shall be a written test requiring competitors to apply, analyze, synthesize and evaluate information related to pharmacology. Competitors will define, interpret and apply pharmacology terms and information in a 100 item multiple choice test plus one tie-breaker essay question. Written test will measure knowledge and understanding at the recall, application and analysis levels. Higher-order thinking skills will be incorporated as appropriate.

Dress Code Competitors must be in official HOSA uniform or proper business attire. Bonus points will be awarded for [proper dress](#).

- Rules and Procedures**
1. Competitors in this event must be active members of HOSA-Future Health Professionals, in good standing in the division in which they are registered to compete (Secondary or Postsecondary/Collegiate).
 2. Competitors must be familiar with and adhere to the "[General Rules and Regulations of the National HOSA Competitive Events Program \(GRR\)](#)."
 3. One essay question will be administered with the original test. In case of a tie, the essay question will be judged and used to break the tie.
 4. The test plan and resources for Pharmacology are:

PHARMACOLOGY

Safety will be integrated throughout the test plan

- Basic Concepts in Pharmacology 12%
- Career Opportunities in Pharmacology 3%
- Ethical and Legal Responsibilities 10%
- Pediatrics and Geriatrics Adaptations 10%
- Drug Names, Classifications, Action, and Interactions 30%
- Drug Administration 20%
- Drug Measurement, Dosage, Conversions 10%
- Technologies in Pharmacology 5%

References for Pharmacology

- [Fulcher, Soto and Fulcher. *Pharmacology: Principles and Applications*. Elsevier, Latest edition.](#)
- [Ford, Susan and Sally Roach. *Roach's Introductory Clinical Pharmacology*. Lippincott, Williams and Wilkins, Latest edition.](#)
- **Please note:** Calculators are not allowed for Pharmacology, but two (2) sheets of blank paper will be provided per competitor.

NOTE: States/regions 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 Area/Region/State for the process you will be using.

5. All competitors shall report to the site of the event at the time designated for the event orientation. The test will immediately follow the orientation. At ILC, [photo ID](#) must be presented prior to competing in each round. **No proxies will be allowed for the orientation.**
6. At the International Leadership Conference, HOSA will provide basic handheld calculators (no graphing calculators) for addition, subtraction, division, multiplication and square root. Check with State Advisor to determine if a calculator will be used at the State level.
7. All competitors will receive two (2) 8.5x11" sheets of blank paper for use during the test
8. [Test Instructions:](#) The competitors will be given instructions and will be notified to start the test. There will be a maximum of 90 minutes to complete the test. Competitors should leave the testing site promptly after submitting all testing materials and evaluations.
9. **TIME REMAINING ANNOUNCEMENTS:** There will be a verbal announcement when there are 60 minutes, 30 minutes, 15 minutes, 5 minutes, and 1 minute remaining to complete the test.
10. The competitor should write his/her answer to the tie-breaker essay question on the tie-breaker page of the test that remains attached to the original test.
11. **ROUNDING:** When rounding decimal numbers to the nearest tenths, hundredths, or thousandths, look to the immediate right of the digit located in the position to be rounded. If the number to the direct right is 5 or larger, round to the position up one number and drop everything that follows. If the number to the direct right is 4 or smaller, leave the position being rounded as is and drop everything that follows.

In specific situations, answers will be rounded per medical protocol. For example, pediatric dosage is always rounded DOWN to avoid potential overdose. **Unless otherwise indicated, all answers should be rounded to the nearest whole number.** (Examples: 31.249 (rounded down) = 31 and 23.75 (rounded up) = 24).
12. HOSA offers numerous scholarships every year to its members interested in pursuing a variety of health careers. As you consider participating in this competitive event, please keep in mind there may be a HOSA Scholarship offered that fits your interests! For more information on the HOSA Scholarship program, please visit <http://www.hosa.org/scholarships>.

Competitor Must Provide:

- Two #2 lead pencils with an eraser
- [Photo ID](#)

FOR SPECIFICS ON EVENT MANAGEMENT SEE [MANAGING COMPETITIVE EVENTS](#)

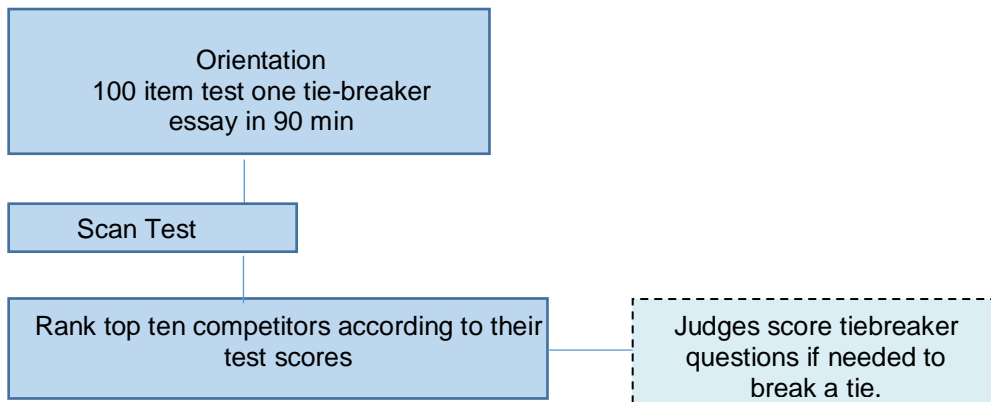
Required Personnel:

- One Event Manager
- One Judge Manager (JM) to provide quality assurance for the event by ensuring that the guidelines are followed and all event documents are complete.
- Proctors for Testing – Approximately one proctor for 20 competitors
- One judge who is considered by the National HOSA Competitive Events committee to be an expert in the area being tested - to grade the essay questions in case of a tie
- Event assistants as needed

Facilities, Equipment and Materials:

- One room to accommodate the total number of competitors (see [HOSA Room Sets](#))
- Tables/chairs or schoolroom desks/chairs for total number of competitors
- Table/chairs for event personnel to provide for registration and materials distribution
- List of competitors for check-in
- One pre-numbered test per competitor
- Scantron/answer forms- one copy per competitor
- Blank paper (2 sheets per competitor)
- Calculators (1 per competitor)
- Timer or clock
- Evaluation Forms – competitor and personnel
- #2 lead pencils with eraser to complete evaluations (event personnel)
- Two (2) sheets of blank paper per competitor for Pharmacology Knowledge Test

Event Flow Chart



Sample Test Questions

1. What federal legislation established funding for research of potentially dangerous drugs in the treatment of rare chronic illnesses?
 - A. Amendment to Applications for FDA Approval to Market New Drug
 - B. Drug Regulation and Reform Act of 1978
 - C. Omnibus Budget Reconciliation Act
 - D. Orphan Drug Act of 1983
2. The client who has been taking salicylates for a long period of time should be watched closely for _____.
 - A. GI bleeding
 - B. fever of undetermined origin
 - C. hypotension
 - D. diminished urinary output
3. Dramamine 25 mg po is ordered for nausea and vomiting. The bottle is labeled 5 mg/4 mL. How many mL will be given per dose?
 - A. 16 mL
 - B. 20 mL
 - C. 40 mL
 - D. 50 mL