

# BASIC HEALTH CARE SKILLS



## PURPOSE

To evaluate each contestant's beginning level of health occupations knowledge and to recognize outstanding students for excellence and professionalism.

First, download and review the General Regulations at: <http://updates.skillsusa.org>.

## ELIGIBILITY

Open to students enrolled in any high school health program.

## CLOTHING REQUIREMENT

### Class B: Healthcare Attire

- Official blue scrubs
- Scrubs should fit appropriately for all health contests and should be properly hemmed and wrinkle free. Only plain, white, collarless T-shirts may be worn underneath the scrubs. Hair must be pinned up and off the collar.
- White socks or skin-tone seamless hose
- Health-professionals white or black leather work shoes
- Shoes must be all-white or black leather (no canvas), completely enclosed (no open-toe or open-heel). Athletic-style shoes that meet the criteria are acceptable.

These regulations refer to clothing items that are pictured and described at: [www.skillsusastore.org](http://www.skillsusastore.org). If you have questions about clothing or other logo items, call 800-401-1560 or 703-956-3723.

**Note:** Contestants must wear their official contest clothing to the contest orientation meeting.

1. Blue scrub uniform
2. Clinical shoes — clean, white and minimal commercial markings

Contestants must meet workplace expectations. No artificial nails, visible tattoos, or more

visible piercings than one studded earring in each earlobe will be allowed.

## EQUIPMENT AND MATERIALS

1. Supplied by the technical committee:
  - a. All instruments, equipment and materials required for the contest
  - b. All necessary information and furnishings for judges and technical committee
  - c. Laptop computer, projector and screen (computer will have Windows XP Microsoft Office software and USB ports)
2. Supplied by the contestant:
  - a. Watch
  - b. Pen (black ink)
  - c. Safety glasses/shield (only if needed for the prepared presentation)
  - d. All competitors must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty.
  - e. Bring one copy of your current résumé in your "career" area of interest to the orientation meeting.

**Note:** Five points will be deducted for not providing the résumé.

## SCOPE OF THE CONTEST

The scope of the contest is defined by industry standards as set by the SkillsUSA technical committee.

### Knowledge Performance

The contest will include a written knowledge test assessing general knowledge of basic health care skills. Topics assessed may include but are not limited to: life sciences related to health care, communication skills, employability, law and ethics, and work safety practices.

### Skill Performance

The second portion of the contest will be a series of workstations in which contestants will demonstrate their knowledge of basic health care skills. Topics that will be assessed may include but are not limited to: core therapeutic and clinical skills, emergency care for infants

through adults, communication skills, key medical terms and abbreviations, law and ethics, and work safety. Prior to the event, the contestant will prepare a five- to seven-minute demonstration of a basic health care skill. Guidelines for this presentation are listed below.

### Presentation Guidelines

1. The purpose of the presentation is to present a topic related to basic health care through demonstration, display and/or explanation.
2. A presentation will be compact, no larger than 30"x30"x30" and presented in five to seven minutes. A 4'x6' table space will be available. Any visual aids (signs, charts, transparencies, slides, diagrams) are to be prepared by contestants. Three-sided poster display boards and PowerPoint presentations stored on jump drives are permitted (**no note cards**). No full-size adult mannequins are allowed. No pressurized aerosol cans of any kind will be permitted, and no compressed air, gas or flammable liquid may be used.
3. All employers' names and manufacturers' trade names must be covered or removed.
4. The demonstration will neither promote nor advertise any commercial organization or product.
5. The title should designate the exact nature of the presentation. Catchy titles are not appropriate to the scientific and educational purpose of the presentation.
6. The prepared presentation does not include another person acting as a patient.
7. Time limit: 5–7 minutes
8. Complete a job application and résumé.
9. Be prepared to present an oral interview.

### Standards and Competencies

#### CARE 1.0 — Apply academic knowledge of life sciences as related to the health care professions

- 1.1 Demonstrate knowledge of human anatomy structure and function
  - 1.1.1 Identify major body systems and their functions
  - 1.1.2 Compare interrelationships of the body systems

- 1.1.3 Describe basic diseases affecting each major body system
- 1.1.4 Define, pronounce and spell key terms
- 1.2 Integrate concepts of Maslow's Hierarchy of Needs, and human growth and development
  - 1.2.1 List the five levels of Maslow's Hierarchy of Needs
  - 1.2.2 Discuss how clients meet or satisfy each level of Maslow's Hierarchy of Needs
  - 1.2.3 Summarize each of Erickson's eight stages of psychosocial development
- 1.3 Apply knowledge of nutrition
  - 1.3.1 Recall groups of essential nutrients and vitamins, and their functions and sources
  - 1.3.2 Distinguish between digestion, absorption, metabolism and excretion
  - 1.3.3 Describe purposes of key therapeutic diets
  - 1.3.4 Define, pronounce and spell key terms
- 1.4 Perform core therapeutic and clinical skills that relate to most basic health care skill careers
  - 1.4.1 Position, turn and move a client using correct body alignment
  - 1.4.2 Perform the following transfer techniques: dangling, wheelchair, chair and stretcher
  - 1.4.3 Make closed, open and occupied beds
  - 1.4.4 Administer personal hygiene care
  - 1.4.5 Assist client with eating
  - 1.4.6 Feed a patient
  - 1.4.7 Collect specimens to be sent to the laboratory
  - 1.4.8 Perform range of motion exercises
  - 1.4.9 Ambulate a client using a transfer (gait) belt
  - 1.4.10 Ambulate a client using assist devices
  - 1.4.11 Apply cold or warm packs
  - 1.4.12 Use a reagent strip to test a urine specimen
  - 1.4.13 Provide dignified postmortem care
- 1.5 Execute emergency care for the infant to adult age spectrum

- 1.5.1 Perform basic cardiopulmonary resuscitation
- 1.5.2 Demonstrate emergency measures for choking
- 1.5.3 Apply standard first aid bandages and splints
- 1.5.4 Identify first aid for the following common medical emergencies: bleeding, burns, diabetic reactions, heart attack, hypo/hyperthermia, poisonings, seizures, shock, stroke and trauma

**CARE 2.0 — Express verbal and nonverbal communication skills**

- 2.1 Deliver a prepared presentation
  - 2.1.1 Present a basic health care skills entry-level topic
  - 2.1.2 Conduct presentation between five and seven minutes
  - 2.1.3 Follow presentation guidelines as identified by the technical committee
- 2.2 Demonstrate oral, written and/or telephone communication skills with clients, visitors and staff
  - 2.2.1 Modify communication to meet client needs
  - 2.2.2 Observe, report and document pertinent client data
  - 2.2.3 Exhibit effective interpersonal relationships
  - 2.2.4 Overcome physical and psychological barriers to communication
  - 2.2.5 Express sensitivity to multicultural and multilingual needs
  - 2.2.6 Provide for emotional support of client during procedure/treatment
  - 2.2.7 Assess client's ability to understand
  - 2.2.8 Adapt communication to individual needs including paraphrasing or translating
  - 2.2.9 Ask for clarification when needed
- 2.3 Define, pronounce, spell and use key medical terms and abbreviations
  - 2.3.1 Define prefixes, suffixes and word roots

- 2.3.2 Define, pronounce and spell key medical terms
- 2.3.3 Recognize basic medical abbreviations

**CARE 3.0 — Perceive major career opportunities and systems available in health care**

- 3.1 Describe different careers such as, but not limited to, dentistry, diagnostic, emergency medical services, health information, hearing, medicine, mental health, laboratory, mortuary, nursing, nutrition, radiology, social, therapeutic, veterinary and vision services
  - 3.1.1 Compare various career levels between professional, technologist, technician and aide/assistant
  - 3.1.2 Compare educational requirements from diploma, associate's, baccalaureate, master's and doctorate degrees for certification, registration and/or licensure
  - 3.1.3 Differentiate realm of health care settings
  - 3.1.4 Describe range of services offered
  - 3.1.5 List a governmental or professional organization with oversight in health care
  - 3.1.6 Identify the role and responsibilities of the various levels of individuals within the health care profession
- 3.2 Discuss current trends and events in health care
  - 3.2.1 Discuss increasing costs of health care and reimbursement issues
  - 3.2.2 Discuss alternative/complementary methods of health care
  - 3.2.3 Discuss wellness/prevention programs
  - 3.2.4 Discuss health care reform
  - 3.2.5 Discuss pediatric/geriatric abuse
  - 3.2.6 Discuss technology and science
  - 3.2.7 Discuss governmental bodies and regulatory agencies
  - 3.2.8 Discuss client populations and needs
  - 3.2.9 Discuss allocation of resources

- 3.2.10 Discuss accessibility to health care and insurance
- 3.2.11 Discuss worker shortage and closure of facilities
- 3.2.12 Discuss malpractice costs
- 3.3 Submit a résumé at the pre-contest briefing on Tuesday
  - 3.3.1 Type the document using an easy to read, appropriate font
  - 3.3.2 Provide personal contact information of name, address, phone number and/or email address
  - 3.3.3 State professional goal(s)
  - 3.3.4 Highlight educational background
  - 3.3.5 List career history
  - 3.3.6 Limit to one page
- 3.4 Complete a job application
  - 3.4.1 Write neatly and legibly
  - 3.4.2 Use English and grammar correctly
  - 3.4.3 Follow application form directions for completion
  - 3.4.4 Use black ink
  - 3.4.5 Prepare correspondence related to the employment process
- 3.5 Demonstrate interview skills
  - 3.5.1 Present a neat and clean appearance
  - 3.5.2 Introduce self
  - 3.5.3 Listen closely to questions
  - 3.5.4 Speak clearly
  - 3.5.5 Provide appropriate response to questions
  - 3.5.6 Demonstrate good posture, eye contact and mannerisms
  - 3.5.7 Shake hands and thank the interviewers

**CARE 4.0 — Epitomize quality employment and teamwork skills**

- 4.1 Exemplify professional conduct and appearance
  - 4.1.1 Exhibit personal skills, such as attendance, time management, individual responsibility and teamwork
  - 4.1.2 Use analytical skills to solve problems and make decisions
  - 4.1.3 Adapt to changing situations
- 4.2 Apply basic mathematical concepts to include addition, subtraction, division, and multiplication of whole numbers,

- common fractions, decimals fractions, ratio, proportion percentage, average, area, volume, metrics and written problems specific to area of training
- 4.2.1 Measure and record vital signs, height, weight, intake and output
- 4.2.2 Graph TPR and B/P
- 4.2.3 Convert between the metric and household volume, length and weight measurements and calculations
- 4.2.4 Relate standard time with the 24-hour clock
- 4.3 Possess cultural diversity skills
  - 4.3.1 Differentiate between culture, ethnicity and race
  - 4.3.2 Identify some of the major ethnic groups in the United States
  - 4.3.3 Cite how bias, prejudice or stereotyping can cause a barrier to effective relationships with others
  - 4.3.4 Recognize how language, personal space, touching, eye contact and gestures are affected by cultural diversity
  - 4.3.5 Compare and contrast the diverse health beliefs of different ethnic/cultural groups
  - 4.3.6 Identify methods health care workers can use to show respect for individual religious beliefs and different cultural backgrounds
- 4.4 Incite teamwork
  - 4.4.1 Practice team membership skills such as cooperation, leadership and anticipation of the needs of coworkers
  - 4.4.2 Respect cultural and religious differences of team members
  - 4.4.3 Interact with others in a manner consistent with the health care team structure and lines of authority
  - 4.4.4 Manage conflict within the workplace through consideration of others' points of view
  - 4.4.5 Respect interdisciplinary differences among team members

**CARE 5.0 — Differentiate between law and ethics**

- 5.1 Explain legal responsibilities, limitations and the implications of their action within the health care delivery system
  - 5.1.1 Operate within the legal framework of liabilities in your scope of work or practice
  - 5.1.2 Explain client rights
  - 5.1.3 Recognize and report signs of neglect and abuse
  - 5.1.4 Explain situations that have the potential for legal problems
  - 5.1.5 Define key terminology related to law
  - 5.1.6 Perform in accordance to regulations, policies, laws, and legislated rights of clients
  - 5.1.7 Be aware of malpractice and liability issues
  - 5.1.8 Maintain client confidentiality
  - 5.1.9 Obtain informed consent
  - 5.1.10 Comply with legal requirements of documentation
- 5.2 Describe accepted ethical practices with respect to cultural, social and ethnic differences within the health care environment
  - 5.2.1 Perform duties within established ethical guidelines, supporting sensitive and quality health care delivery
  - 5.2.2 Respect client rights and self-determination
  - 5.2.3 Promote justice and equal treatment to all persons
  - 5.2.4 Recognize the importance of client need over other considerations
  - 5.2.5 Define key terminology related to ethics

**CARE 6.0 — Create a safe working environment**

- 6.1 Apply principles of body mechanics
  - 6.1.1 Use correct body mechanics in the health care environment
  - 6.1.2 Observe safety standards established by Occupational Safety and Health Administration (OSHA)
- 6.2 Be vigilant for fire safety
  - 6.2.1 Implement correct plan of action during fire emergencies

- 6.2.2 Differentiate between the four main classes of fire extinguishers
- 6.2.3 Simulate the operation of a fire extinguisher
- 6.2.4 Describe the PASS acronym for fire extinguisher usage
- 6.3 Practice infection control
  - 6.3.1 Perform correct hand-washing technique
  - 6.3.2 Identify at-risk behaviors and modes of transmission of pathogens
  - 6.3.3 Apply principles of disinfection
  - 6.3.4 State the chain of infection's six components
  - 6.3.5 Differentiate between antisepsis, disinfection and sterilization
- 6.4 Employ standard precautions/body substance isolation techniques
  - 6.4.1 Use standard precautions outlined by the Centers for Disease Control and Prevention (CDC)
  - 6.4.2 Observe blood-borne pathogen standards established by OSHA
  - 6.4.3 Maintain transmission-based isolation techniques by donning the appropriate personal protective equipment (PPE) when indicated
  - 6.4.4 Manage hazardous materials
- 6.5 Demonstrate aseptic technique
  - 6.5.1 Create and maintain a sterile field
  - 6.5.2 Don and remove sterile gloves/gown
  - 6.5.3 Assist with minor surgical procedures
  - 6.5.4 Apply principles of sterilization
  - 6.5.5 Clean, disinfect and sterilize surfaces, instruments, supplies, and equipment using appropriate methods
  - 6.5.6 Prepare and/or package equipment for sterilization
- 6.6. Manage a safe environment
  - 6.6.1 Report and/or correct safety hazards
  - 6.6.2 Maintain equipment in proper working order
  - 6.6.3 Maintain a safe client environment
  - 6.6.4 Verify identity of client

- 6.6.5 Observe safety precautions during oxygen administration
- 6.6.6 Use precautions in the presence of ionizing radiation
- 6.6.7 Handle materials, supplies and equipment safely
- 6.6.8 Comply with pertinent regulatory guidelines, including OSHA standards
- 6.7 Complete NOCTI skills-related written test of 25 to 50 multiple choice questions
- 6.8 Create a safe work environment

### **Committee Identified Academic Skills**

The technical committee has identified that the following academic skills are embedded in this contest.

#### **Math Skills**

- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Simplify numerical expressions
- Solve practical problems involving percents
- Solve problems using proportions, formulas and functions
- Convert metric to English volume, length, weight measurements and calculations
- Relate standard time with the 24-hour clock (military time)

#### **Science Skills**

- Use knowledge of cell theory
- Use knowledge of patterns of cellular organization (cells, tissues, organs, systems)
- Describe basic needs of organisms
- Describe factors that influence how populations change over time
- Use knowledge of reproduction and transmission of genetic information
- Describe and recognize elements, compounds, mixtures, acids, bases and salts
- Describe and recognize solids, liquids and gases
- Describe characteristics of types of matter based on physical and chemical properties
- Use knowledge of physical properties (shape, density, solubility, odor, melting point, boiling point, color)
- Use knowledge of chemical properties (acidity, basicity, combustibility, reactivity)
- Describe phases of matter

- Use knowledge of potential and kinetic energy
- Use knowledge of mechanical, chemical and electrical energy
- Use knowledge of heat, light, and sound energy
- Use knowledge of temperature scales, heat and heat transfer
- Use knowledge of sound and technological applications of sound waves
- Use knowledge of the nature and technological applications of light
- Use knowledge of work, force, mechanical advantage, efficiency and power

#### **Language Arts Skills**

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice
- Demonstrate use of such nonverbal communication skills as eye contact, posture and gestures using interviewing techniques to gain information
- Demonstrate comprehension of a variety of informational texts
- Use text structures to aid comprehension
- Identify words and phrases that signal an author's organizational pattern to aid comprehension
- Understand source, viewpoint and purpose of texts
- Organize and synthesize information for use in written and oral presentations
- Demonstrate knowledge of appropriate reference materials
- Use print, electronic databases and online resources to access information in books and articles
- Demonstrate narrative writing
- Demonstrate informational writing
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing

## Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.

### Math Standards

- Numbers and operations
- Geometry
- Measurement
- Data analysis and probability
- Problem solving
- Communication
- Connections
- Representation

**Source:** NCTM Principles and Standards for School Mathematics. For more information, visit: <http://www.nctm.org>.

### Science Standards

- Understands the principle of heredity and related concepts
- Understands the structure and function of cells and organisms
- Understands the structure and properties of matter
- Understands the nature of scientific inquiry
- Understands the scientific enterprise

**Source:** McREL compendium of national science standards. To view and search the compendium, visit: <http://www2.mcrel.org/compendium/browse.asp>.

### Language Arts Standards

- Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works
- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g.,

sound-letter correspondence, sentence structure, context, graphics)

- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
- Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language and genre to create, critique and discuss print and nonprint texts
- Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

**Source:** IRA/NCTE Standards for the English Language Arts. To view the standards, visit: [www.ncte.org/standards](http://www.ncte.org/standards).