

HEALTH SCIENCE AND PUBLIC SAFETY MIDDLE SCHOOL STANDARDS



This document was prepared by:

Office of Career Readiness, Adult Learning & Education Options
Nevada Department of Education
755 N. Roop Street, Suite 201
Carson City, NV 89701

www.doe.nv.gov

Adopted by the Nevada State Board of Education on
January 17, 2019

The Nevada Department of Education does not discriminate on the basis of race, color, religion, national origin, sex, disability, sexual orientation, gender identity or expression, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups.

For inquiries, contact the Equity Coordinator at (775) 687-9200.

NEVADA STATE BOARD OF EDUCATION

Elaine Wynn..... President
Mark NewburnVice President
Robert BlakelyMember
David Carter.....Member
Tonia Holmes-Sutton.....Member
Tamara HudsonMember
Dave Jensen.....Member
Cathy McAdooMember
Dawn MillerMember
Felicia Ortiz.....Member
Ashley Macias..... Student Representative

NEVADA DEPARTMENT OF EDUCATION

Steve Canavero, Ph.D.
Superintendent of Public Instruction

Kristine Nelson, Director
Office of Career Readiness, Adult Learning & Education Options

VISION

All Nevadans ready for success in the 21st century

MISSION

To improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence



TABLE OF CONTENTS

Nevada State Board of Education / Nevada Department of Education	iii
Acknowledgements / Standards Development Members / Alignment to CTE Standards / Project Coordinator	vii
Introduction.....	ix
Content Standard 1.0 – Understand Careers and the Nature of Work.....	1
Content Standard 2.0 – Understand Basic Anatomy and Physiology	2
Content Standard 3.0 – Demonstrate Knowledge of Public Safety	3
Content Standard 4.0 – Understand Basic Health Science Concepts.....	4
Content Standard 5.0 – Explore Basic Medical Concepts	5
Crosswalks and Alignments.....	7

ACKNOWLEDGEMENTS

The Department of Education relies on teachers and industry representatives who have the technical expertise and teaching experience to develop standards and performance indicators that truly measure student skill attainment. Most important, however, is recognition of the time, expertise and great diligence provided by the writing team members in developing the career and technical standards for middle school Health Science and Public Safety.

STANDARDS DEVELOPMENT MEMBERS

Sandra Ayers	Teacher	Battle Mountain High School, Battle Mountain
Christopher Batterman	Teacher	Bonanza High School, Las Vegas
Maggie Cox	Teacher	Desert Pines High School, Las Vegas
Cindy Dinkel	Teacher	Desert Oasis High School, Las Vegas
Paula Green	District Nurse	Battle Mountain JH School, Battle Mountain
Victoria Jaacovi	Teacher	Carson Middle School, Carson City
Abigail Nowak	Teacher	Desert Oasis High School, Las Vegas
Mike Oechsner	CTSO ED	TRI Leadership Resources, LLC
Frank Sakelarios	Teacher	Carson High School, Carson City

ALIGNMENT TO CTE STANDARDS

Middle school standards are aligned to CTE program areas and broadly built upon high school CTE standards within a program area. All CTE standards developed through the Nevada Department of Education are validated by business and industry. Middle school standards are designed to provide foundational knowledge about careers in a program area with hands-on learning, leadership development, and career exploration.

The six program areas in Career and Technical Education are: Agriculture and Natural Resources; Business and Marketing Education; Education, Hospitality and Human Services; Health Science and Public Safety; Information and Media Technologies; and Skilled and Technical Sciences.

PROJECT COORDINATOR

Randi Hunewill, Assistant Director
Health Science and Public Safety
Office of Career Readiness, Adult Learning & Education Options
Nevada Department of Education

INTRODUCTION

The standards in this document are designed to clearly state what the student should know and be able to do upon completion of a middle school course in Health Science and Public Safety. These standards may assist the student in their career pathway decision-making before entering high school.

These standards are designed for the student to complete all standards in one course. These standards are intended to guide curriculum objectives for a middle school course in Health Science and Public Safety.

The standards are organized as follows:

Content Standards are general statements that identify major areas of knowledge, understanding, and the skills students are expected to learn in key subject and career areas by the end of the course.

Performance Standards follow each content standard. Performance standards identify the more specific components of each content standard and define the expected abilities of students within each content standard.

Performance Indicators are very specific criteria statements for determining whether a student meets the performance standard. Performance indicators may also be used as learning outcomes, which teachers can identify as they plan their course learning objectives.

The crosswalk and alignment section of the document shows where the performance indicators support the Nevada Academic Content Standards in Science (based on the Next Generation Science Standards) and in English Language Arts and Mathematics (based on the Common Core State Standards). Where correlation with academic content standards and practices exist, students in the middle school Health Science and Public Safety course perform learning activities that support, either directly or indirectly, achievement of the academic content standards that are listed.

Career and Technical Student Organizations are co-curricular national associations that directly enforce learning in the CTE classroom through curriculum resources, competitive events, and leadership development. Some CTSOs have middle school level programs and can offer students the opportunity to develop leadership skills and apply what they learn in the area of Health Science and Public Safety.

The **Standards Reference Code** is only used to identify or align performance indicators listed in the standards to daily lesson plans, curriculum documents, or national standards.

Program Area Name: Health Science and Public Safety Standards Reference Code: **MSHPS**

Example: MSHPS.2.3.4

Standards	Content Standard	Performance Standard	Performance Indicator
Health Science and Public Safety	2	3	4

CONTENT STANDARD 1.0 : UNDERSTAND CAREERS AND THE NATURE OF WORK**PERFORMANCE STANDARD 1.1 : EXPLORE CAREER PATHWAYS**

- 1.1.1 Relate your skills, interests, talents, and values to a career pathway
- 1.1.2 Explain careers in each of the Career Clusters
- 1.1.3 Research the pathway to a career of interest
- 1.1.4 Describe the difference between various types of academic degrees and other credentials
- 1.1.5 Discuss the importance of company dress codes
- 1.1.6 Create or review an academic and career plan
- 1.1.7 Define terms used within technical careers

PERFORMANCE STANDARD 1.2 : COLLABORATE WITH OTHERS

- 1.2.1 Practice communicating with others in a variety of ways to explain an idea, solution, or problem
- 1.2.2 Explain what it means to be reliable and honest
- 1.2.3 Demonstrate leadership skills through participation in a school activity, club, or career and technical student organization
- 1.2.4 Plan and/or participate in a community service project
- 1.2.5 Demonstrate conflict-resolution skills
- 1.2.6 Demonstrate critical-thinking and problem-solving skills
- 1.2.7 Practice active listening skills

PERFORMANCE STANDARD 1.3 : PRACTICE LEADERSHIP ROLES

- 1.3.1 Demonstrate language, attitude, and manners suitable for the workplace
- 1.3.2 Assume different roles on a team to accomplish a goal
- 1.3.3 Discuss characteristics of a leader and a team member
- 1.3.4 Prepare and make a presentation in front of a group
- 1.3.5 Practice speaking to adults in an interview format
- 1.3.6 Describe the importance of personal appearance
- 1.3.7 Utilize a timeline to manage a project

CONTENT STANDARD 2.0 : UNDERSTAND BASIC ANATOMY AND PHYSIOLOGY**PERFORMANCE STANDARD 2.1 : DEFINE AND EXPLAIN ANATOMICAL TERMS**

- 2.1.1 Define common prefixes, suffixes, abbreviations, and word roots relating to body structures and functions
- 2.1.2 Correctly spell and pronounce anatomical terms

PERFORMANCE STANDARD 2.2 : DEMONSTRATE KNOWLEDGE OF HUMAN ANATOMY AND PHYSIOLOGY

- 2.2.1 Identify the bones of the axial and appendicular skeleton and their gross anatomical landmarks
- 2.2.2 Explain the anatomical structure and physiological functions of the human body
- 2.2.3 Explain the functions of different human body systems and list the major organs within each system

CONTENT STANDARD 3.0 : DEMONSTRATE KNOWLEDGE OF PUBLIC SAFETY**PERFORMANCE STANDARD 3.1 : EXPLORATION OF CRIMINAL JUSTICE SYSTEM REGULATIONS**

- 3.1.1 Explore law enforcement & military science mission and organizations
- 3.1.2 Recognize legal search and seizure and Miranda Rights
- 3.1.3 Differentiate between felonies, misdemeanors, and ordinance violations
- 3.1.4 Compare and contrast types of evidence and collection methods
- 3.1.5 Differentiate between assault and battery as it applies to suspect/patient interaction

PERFORMANCE STANDARD 3.2 : EXPLORATION OF EMERGENCY SERVICES

- 3.2.1 Explore the fire service mission and history
- 3.2.2 Explore the emergency medical service mission and history
- 3.2.3 Identify the concepts of fire behavior and fire class types
- 3.2.4 Understand spread of disease as it applies to EMS patient care
- 3.2.5 Learn and practice proper hand washing techniques

PERFORMANCE STANDARD 3.3 : IMPLEMENTATION OF EMERGENCY RESPONSE

- 3.3.1 Use a portable fire extinguisher safely; pull, aim, squeeze and sweep (PASS) method of application
- 3.3.2 Design an emergency or disaster plan
- 3.3.3 Interview a professional from the field of Law, EMS, or Fire
- 3.3.4 Demonstrate proper use of public safety career personal protective equipment (PPE)

CONTENT STANDARD 4.0 : UNDERSTAND BASIC HEALTH SCIENCE CONCEPTS**PERFORMANCE STANDARD 4.1 : EXPLORE BASIC FIRST AID AND CPR**

- 4.1.1 Apply the Concept of Universal Precautions
- 4.1.2 Demonstrate cardiopulmonary resuscitation (CPR) skills
- 4.1.3 Demonstrate basic first aid skills

PERFORMANCE STANDARD 4.2 : EXPLORE VITAL SIGNS

- 4.2.1 Demonstrate an understanding of normal values for vital signs
- 4.2.2 Measure heart rate and blood pressure
- 4.2.3 Measure body temperature
- 4.2.4 Measure respiratory rate

PERFORMANCE STANDARD 4.3 : DESCRIBE AND APPLY BEHAVIORS FOR DISEASE PREVENTION AND WELLNESS

- 4.3.1 Describe practices, behaviors, and lifestyle choices that promote health and wellness
- 4.3.2 Describe strategies for prevention of disease
- 4.3.3 Understand the basic roles and responsibilities of the Centers for Disease Control (CDC)
- 4.3.4 Explain general nutritional requirements, including USDA recommendations

CONTENT STANDARD 5.0 : EXPLORE BASIC MEDICAL CONCEPTS**PERFORMANCE STANDARD 5.1 : DEFINE AND USE MEDICAL TERMINOLOGY**

- 5.1.1 Differentiate between accepted abbreviations used in healthcare
- 5.1.2 Interpret and correctly utilize medical acronyms

PERFORMANCE STANDARD 5.2 : UNDERSTAND DISEASE PREVENTION

- 5.2.1 Explain chain of infection and infection control
- 5.2.2 Describe the role of vaccines in disease prevention
- 5.2.3 Identify and describe common diseases and disorders

PERFORMANCE STANDARD 5.3 : UNDERSTAND THE IMPORTANCE OF PATIENT AND SELF CARE

- 5.3.1 Explain the importance of hygiene and grooming
- 5.3.2 Explain importance of creating a comfortable, safe, and clean environment
- 5.3.3 Summarize physical, mental, and psychosocial needs throughout the lifespan

PERFORMANCE STANDARD 5.4 : UNDERSTAND PATIENT INFORMATION

- 5.4.1 Identify the importance for security of health records and different methodologies for protecting patient confidentiality (HIPAA)
- 5.4.2 Evaluate different systems available for data collection and analysis

This Page was Intentionally Left Blank.

CROSSWALKS AND ALIGNMENTS**CROSSWALKS (ACADEMIC STANDARDS)**

The crosswalk of the Health Science and Public Safety Middle School Standards shows links to the Nevada Academic Content Standards for English Language Arts. The crosswalk identifies the performance indicators in which the learning objectives in the middle school Health Science and Public Safety course support academic learning. The performance indicators are grouped according to their content standard and are crosswalked to the Nevada Academic Content Standards for English Language Arts.

ALIGNMENTS (MATHEMATICAL PRACTICES)

Several performance indicators support the Mathematical Practices. The following table illustrates the alignment of the Health Science and Public Safety Middle School Standards Performance Indicators and the Mathematical Practices. This alignment identifies the performance indicators in which the learning objectives in the middle school Health Science and Public Safety course support academic learning.

ALIGNMENTS (SCIENCE AND ENGINEERING PRACTICES)

Several performance indicators support the Science and Engineering Practices. The following table illustrates the alignment of the Health Science and Public Safety Standards Performance Indicators and the Science and Engineering Practices. This alignment identifies the performance indicators in which the learning objectives in the middle school Health Science and Public Safety course support academic learning.

**CROSSWALK OF HEALTH SCIENCE AND PUBLIC SAFETY MIDDLE SCHOOL STANDARDS
AND THE NEVADA ACADEMIC CONTENT STANDARDS**

CONTENT STANDARD 1.0: UNDERSTAND CAREERS AND THE NATURE OF WORK

Performance Indicators	Nevada Academic Content Standards
1.1.1	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.8 Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</p>
1.1.2	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</p>
1.1.3	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6–8 texts and topics</i>.</p> <p>English Language Arts: Writing Standards for Literacy in Science and Technical Subjects WHST.6-8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.</p> <p>WHST.6-8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>
1.1.7	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6–8 texts and topics</i>.</p>
1.2.1	<p>English Language Arts: Writing Standards for Literacy in Science and Technical Subjects WHST.6-8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
1.3.1	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6–8 texts and topics</i>.</p>
1.3.4	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p> <p>English Language Arts: Writing Standards for Literacy in Science and Technical Subjects WHST.6-8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.</p>

CONTENT STANDARD 2.0: UNDERSTAND BASIC ANATOMY AND PHYSIOLOGY

Performance Indicators	Nevada Academic Content Standards
2.1.1	English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6–8 texts and topics</i> .

CONTENT STANDARD 3.0: DEMONSTRATE KNOWLEDGE OF PUBLIC SAFETY

Performance Indicators	Nevada Academic Content Standards
3.1.2	English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts.
3.1.4	English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.8 Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

CONTENT STANDARD 4.0: UNDERSTAND BASIC HEALTH SCIENCE CONCEPTS

Performance Indicators	Nevada Academic Content Standards
4.2.1	English Language Arts: Writing Standards for Literacy in Science and Technical Subjects WHST.6-8.1b Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.

CONTENT STANDARD 5.0: EXPLORE BASIC MEDICAL CONCEPTS

Performance Indicators	Nevada Academic Content Standards
5.2.1	<p>English Language Arts: Reading Standards for Literacy in Science and Technical Subjects RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>
5.4.1	<p>English Language Arts: Writing Standards for Literacy in Science and Technical Subjects WHST.6-8.2a Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p>

**ALIGNMENT OF HEALTH SCIENCE AND PUBLIC SAFETY MIDDLE SCHOOL STANDARDS
AND THE MATHEMATICAL PRACTICES**

Mathematical Practices	Health Science and Public Safety Performance Indicators
1. Make sense of problems and persevere in solving them.	
2. Reason abstractly and quantitatively.	5.3.3
3. Construct viable arguments and critique the reasoning of others.	
4. Model with mathematics.	2.2.1
5. Use appropriate tools strategically.	4.2.2, 4.2.3, 4.2.4
6. Attend to precision.	3.1.4
7. Look for and make use of structure.	5.4.2
8. Look for and express regularity in repeated reasoning.	

**ALIGNMENT OF HEALTH SCIENCE AND PUBLIC SAFETY MIDDLE SCHOOL STANDARDS
AND THE SCIENCE AND ENGINEERING PRACTICES**

Science and Engineering Practices	Health Science and Public Safety Performance Indicators
1. Asking questions (for science) and defining problems (for engineering).	3.2.4
2. Developing and using models.	4.1.1
3. Planning and carrying out investigations.	5.2.1
4. Analyzing and interpreting data.	5.4.2
5. Using mathematics and computational thinking.	4.2.1; 4.3.4
6. Constructing explanations (for science) and designing solutions (for engineering).	3.3.2
7. Engaging in argument from evidence.	
8. Obtaining, evaluating, and communicating information.	1.2.1