



EXAMINATION BLUEPRINT CHANGES IN 2024

Every five years, or more often if necessary, BCSP revalidates all certification examinations. During the revalidation process a new blueprint is created that reflects the consensus of the profession as to the key elements a minimally qualified candidate must possess to be deemed competent.

The Safety Management Specialist® (SMS®) examination began its revalidation process in 2021 and a new blueprint was generated. The following is a synopsis of the changes:

- Overall, a significant amount of the general concepts identified in the current blueprint carried over to the new blueprint; however, all of the domains have increased in length due to an increased focus on skills associated with and application of the topics.
- Domain 3 added new content related to fire safety and controls, molds and allergens, reporting requirements, and mental health stressors.
- Domain 4 added new content related to conducting vulnerability assessments and causal analyses and reporting findings.
- The percentage weights of all the domains changed compared to the current blueprint with Domain 1 showing the smallest increase and Domain 4 the largest. Domains 3 and 5 decreased in percentage weight offsetting the increase seen for the other three domains.

The new SMS blueprint is tentatively expected to be effective by the first quarter 2024.

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Safety Professionals



Domain 1

Management Systems • 21.7%

Knowledge of:

1. Basic elements of contractor or multi-employer worksite safety programs
2. Competency/skills assessment management systems relating to worker safety
3. General concepts of effective training
4. Management of change (MOC) procedures related to organizational, operational, and equipment changes
5. Managing corrective actions
6. Principles and techniques used in internal audits
7. Principles, concepts, and applicability of basic elements of safety management systems
8. Required frequency of and need for training and education
9. Techniques and principles for goal setting
10. The process for assessing hazards associated with new products or chemicals introduced to the workplace
11. Unsafe conditions and acts and how they relate to incidents
12. Leading and lagging indicators

Skill to:

1. Apply techniques that encourage employee involvement and commitment to safety in the workplace
2. Apply techniques that encourage management commitment to safety
3. Assess safety, health, and environmental training needs and requirements (regulatory and risk-based)
4. Conduct an internal safety, health, and environmental audit
5. Effectively communicate safety expectations on multi-employer/contractor worksites
6. Set and prioritize safety-related goals

Domain 2

Risk Management • 22.0%

Knowledge of:

1. Common liability exposures
2. Common types of insurance coverage
3. Prevention through Design concepts
4. Techniques and methodologies for assessing risk and implementing risk reduction/control measures in processes or systems
5. The hierarchy of controls
6. The resources and techniques for hazard prevention and control management
7. Work planning and controls

Skill to:

1. Analyze and evaluate safety, health, and environmental risk
2. Apply Prevention through Design concepts
3. Apply the hierarchy of controls and evaluate the effectiveness of selected control(s) in mitigating various types of hazards while considering the likelihood and severity
4. Determine acceptable levels of risk applicable to identified hazards
5. Develop, utilize, and modify a risk matrix
6. Identify the best approach(es) for assessing risk in processes or systems
7. Identify safety, health, and environmental hazards
8. Interpret and apply information related to hazard prevention and control management
9. Prioritize safety, health, and environmental risk
10. Select, review, and refine implemented safety, health, and environmental controls to ensure effectiveness

Domain 3

Safety, Health, and Environmental Concepts • 24.4%

Knowledge of:

1. Basic and engineered hazard controls for vibration
2. Basic hazard controls for bloodborne pathogens and other infectious materials
3. Basic hazard controls for lead
4. Basic hazard controls for noise
5. Basic hazard controls for temperature extremes
6. Basic hazard controls to reduce exposures created by health or physical hazards
7. Basic hazard controls when working with or exposed to electrical hazards
8. Basic principles and practice of fire safety, including protection and prevention and processes that may introduce fire risk in the workplace
9. Potential exposures to molds and allergens, including reactions exhibited in individuals
10. Reporting requirements for environmental, health, and physical exposures
11. Reporting requirements for exposure(s) to high risk conditions
12. Requirements for occupational health programs in the workplace
13. Basic and engineered controls for working with or around machinery and equipment
14. Basic controls for ergonomic hazards associated with the type of work, body positions, or strain on the body from working conditions
15. Basic hazard controls for asbestos
16. Basic hazard controls for radiation (ionizing and non-ionizing)
17. Basic hazard controls for slips, trips, and falls (from all heights and levels)
18. The definition, controls, and levels of risk when working in confined spaces
19. The elements in the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
20. Workplace stressors that affect physical and mental health

Skill to:

1. Apply and audit the elements in the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
2. Recognize conditions related to exposure to temperature extremes
3. Recognize conditions or acts related to ergonomic hazards associated with type of work, body positions, or strain on the body from working conditions
4. Recognize conditions or acts related to potential exposure to excessive noise levels
5. Recognize conditions or acts related to potential exposure to bloodborne pathogens or other infectious agents
6. Recognize conditions or acts that can cause slips, trips, and falls (from all heights and different levels)
7. Recognize conditions that can lead to exposures to molds and allergens and reactions exhibited in individuals
8. Recognize conditions that can lead to lead exposure
9. Recognize conditions that can lead to asbestos exposure
10. Recognize conditions, equipment, or processes that can lead to vibration exposure
11. Recognize conditions, equipment, or processes that can lead to potentially harmful radiation exposure (ionizing and non-ionizing)
12. Recognize exposure(s) to hazardous chemicals in the workplace or environment
13. Recognize fire hazards, conditions, and processes introduced into the workplace and associated risks
14. Recognize how stressors affect workplace conditions and behaviors
15. Recognize unsafe conditions or levels of risk when working in confined spaces
16. Recognize unsafe conditions or levels of risk when working with or exposed to electrical hazards
17. Recognize unsafe conditions when working with or around machinery and equipment
18. Utilize resources to address, modify, or eliminate electrical hazards
19. Utilize resources to address, modify, or eliminate hazards of slips, trips, and falls (from all heights and levels)
20. Utilize resources to address, modify, or eliminate hazards of temperature extremes
21. Utilize resources to address, modify, or eliminate machinery and equipment hazards
22. Utilize resources to address, modify, or eliminate noise sources
23. Utilize resources to address, modify, or eliminate radiation hazards (ionizing and non-ionizing)
24. Utilize resources to address, modify, or eliminate vibration hazards

Domain 4

Incident Investigation and Emergency Preparedness • 18.1%

Knowledge of:

1. Basic elements of workers' injury claims and case management programs
2. Different incident and injury rates for comparison
3. Different tools and techniques of causal analysis
4. Fundamental elements of an emergency response plan
5. Scenarios that activate emergency action plans and/or procedures
6. Techniques that identify gaps in an emergency response plan
7. The components or elements of an effective incident/accident management program
8. The incident command structure and responsibilities during an emergency response

Skill to:

1. Calculate incident and injury rates
2. Conduct a vulnerability assessment to identify credible emergency scenarios
3. Conduct causal analysis and report findings with recommendations
4. Identify gaps in an emergency response plan

Domain 5

Business Case of Safety • 13.8%

Knowledge of:

1. BCSP Code of Ethics
2. Common safety, health, and environmental leadership strategies or principles
3. Conflict resolution techniques
4. Direct and indirect costs and their impact on the organization and workforce
5. Fundamental principles of cost/benefit analysis
6. Surveys and indicators for a generative safety culture
7. Methods to communicate hazards and controls to the workforce
8. Principles and common approaches for a generative safety culture
9. Various methods to present technical and complex safety, health, and environmental information to stakeholders/interested parties

Skill to:

1. Apply BCSP Code of Ethics
2. Apply common safety, health, and environmental leadership strategies or principles
3. Apply conflict resolution techniques
4. Communicate strategic safety, health, and environmental activities, risks, and performance information to diverse audiences and stakeholders/interested parties
5. Facilitate or lead safety meetings
6. Identify and develop a business case for additional budget, resources, or other support
7. Interpret and utilize leading and lagging indicators to drive continual improvement
8. Interpret a cost/benefit analysis
9. Write directives to meet safety objectives and activities