



## Domain 1

*Management Systems • 20.0%*

**Knowledge of:**

1. Principles and common elements of safety management systems (e.g., continuous improvement, safety processes, controls, measurement, standards, implementation)
2. Principles and techniques for encouraging employee involvement and commitment (e.g., value-based safety)
3. Principles and techniques for encouraging management commitment to safety (e.g., voluntary protection program [VPP], mission statement, management involvement in jobsite assessment)
4. Techniques and principles for goal setting (e.g., SMART)
5. Principles and techniques of internal audits
6. Competency/skills assessment management systems (e.g., new hire orientation, assurance of experience, job skills, on the job training) as it pertains to worker safety
7. General concepts of effective training (e.g., learning retention, adult learning principles, training delivery)
8. Recordkeeping related to training and education (e.g., annual, one-time, recertification or retraining)
9. Management of corrective actions (e.g., follow up, follow through, closure of actions, time periods, tracking corrective actions)
10. Unsafe conditions and acts and how they relate to incidents (e.g., Swiss cheese model, bowtie model)
11. Management of change (MOC) procedure and organizational change process
12. Common elements of contractor or multi-employer worksite safety programs (e.g., prequalification, selecting, monitoring, managing risk between contractor and host)
13. Process for assessing hazards associated with new products or chemicals

**Skill to:**

1. Recognize leading and lagging indicators
2. Set and prioritize safety-related goals
3. Assess training needs (regulatory and risk-based)

## Domain 2

*Risk Management • 17.1%*

**Knowledge of:**

1. Resources for hazard prevention and control management (e.g., external resources, internal resources, industry standards, subject matter experts)
2. Work planning and controls (e.g., job safety analysis, preliminary hazard analysis, job/task hazard analysis, safe work permit)
3. Prevention through Design (PtD) concepts (e.g., managing safety through the lifecycle of the program)
4. Common liability exposures (e.g., tort, joint liability, attractive nuisance)
5. Common types of insurance coverage (e.g., differences between property and liability coverage)
6. Hierarchy of controls (e.g., elimination, engineering, substitutions)

**Skill to:**

1. Interpret and apply information related to hazard prevention and control management (e.g., internal resources, external resources, industry standards, safety data sheet)
2. Identify safety, health, and environmental risk (e.g., checklists, brainstorming, observation, lessons learned, experience, HAZID, process safety)
3. Analyze safety, health, and environmental risk (e.g., severity and likelihood/frequency matrix, historical information, industry data, "what if" analysis, process safety)
4. Evaluate and prioritize safety, health, and environmental risk (e.g., high/low risk)
5. Review and refine implemented safety, health, environmental controls to ensure they are effective
6. Use a risk matrix
7. Apply the hierarchy of controls to various types of hazards while considering the likelihood and severity

## Domain 3

*Safety, Health, and Environmental Concepts • 33.1%*

### Knowledge of:

1. Concepts in the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
2. Common controls for slips, trips, and falls (from all levels)
3. Common controls for working with electricity
4. Common controls for working in confined spaces
5. Common controls for working around machinery and equipment
6. Common controls for bloodborne pathogens
7. Common controls for lead
8. Common controls for asbestos
9. Common controls for radiation (ionizing and non-ionizing)
10. Common controls for temperature extremes (e.g., cold or heat stress, contact with extreme temperatures, thermal stress)
11. Common controls for vibration (e.g., whole body, hand/arm)
12. Common controls for noise
13. Common controls for ergonomic hazards associated with the type of work, body positions, or strain on the body from working conditions (e.g., improperly adjusted workstations/chairs, frequent lifting, awkward movements, poor posture, repetitive movements, use of too much force, compression)
14. Common controls for any form of chemical hazards (e.g., liquids, vapors, fumes, dusts, gases, flammable liquids, and pesticides)
15. Common controls for workplace stressors (e.g., workload demand, fatigue, harassment, lack of schedule flexibility, lack of control)
16. Occupational health programs (e.g., medical surveillance, fit for duty, return to work, substance abuse testing)

### Skill to:

1. Recognize unsafe conditions or acts that can cause slips, trips, and falls (from all levels)
2. Recognize unsafe conditions or acts when working with electricity
3. Recognize unsafe conditions or acts when working in confined spaces
4. Recognize unsafe conditions or acts when working around machinery and equipment (e.g., caught in, struck by, pinch points)
5. Recognize conditions that could lead to unsafe exposures to molds and allergens
6. Recognize unsafe conditions or acts related to potential exposures to bloodborne pathogens
7. Recognize unsafe conditions or acts related to potential exposures lead
8. Recognize unsafe conditions or acts related to potential exposures to asbestos
9. Recognize unsafe conditions or acts related to potential exposures to radiation (ionizing and non-ionizing)
10. Recognize unsafe conditions or acts related to potential exposures to temperature extremes (e.g., cold or heat stress, contact with extreme temperatures, thermal stress)
11. Recognize unsafe conditions or acts related to potential exposures to vibration (e.g., whole body, hand/arm)
12. Recognize unsafe conditions or acts related to potential exposures to noise
13. Recognize unsafe conditions or acts related to ergonomic hazards associated with the type of work, body positions, or strain on the body from working conditions (e.g., improperly adjusted workstations/chairs, frequent lifting, awkward movements, poor posture, repetitive movements, use of too much force, compression)
14. Recognize unsafe conditions or acts related to exposures to any form of chemicals (e.g., liquids, vapors, fumes, dusts, gases, flammable liquids, and pesticides)
15. Recognize unsafe conditions or acts related to workplace stressors (e.g., workload demand, fatigue, harassment, lack of schedule flexibility, lack of control)

## Domain 4

*Incident Investigation and Emergency Preparedness • 11.5%*

### Knowledge of:

1. Fundamentals of causal analysis (e.g., 5 whys, root cause analysis)
2. Components or elements of an effective incident/accident management program
3. Emergency action requirements/procedures (e.g., response plans, evacuations, preparedness, operation upsets)
4. Components or elements of an emergency response plan (e.g., roles and responsibilities, emergency contact information, stakeholder notification, media response)
5. Incident command structure in emergency response
6. Techniques for identifying gaps in an emergency response plan (e.g., table top drills, lessons learned)
7. Basic elements of workers' compensation and case management programs

### Skill to:

1. Calculate incident and injury rates

# Domain 5

## *Business Case of Safety • 18.3%*

### **Knowledge of:**

1. Cost/benefit analysis principles and common techniques (e.g., return on investment [ROI], as low as reasonably practicable [ALARP], as low as reasonably achievable [ALARA])
2. Direct and indirect costs in relation to safety
3. Experience modification rate (EMR), or premium rate, and how it is used
4. Principles of positive safety/organizational culture and common techniques for creating a positive safety culture (e.g., Hearts & Minds, behavioral safety management [BSM], behavior-based safety [BBS], stop work, open communication, culture or perception surveys)
5. Indicators of a positive safety/organizational culture (e.g., leading indicators, management system, management commitment)
6. Techniques and processes for communicating hazards and controls to stakeholders (e.g., management, workforce)
7. Presentation techniques or best practices for communicating technical and other safety information to stakeholders (e.g., management, workforce)
8. Conflict management techniques (e.g., situational leadership, good conflict versus bad conflict, diffusion techniques, relationship management)
9. Common leadership strategies or principles (e.g., setting good example, building trust)
10. BCSP Code of Ethics

### **Skill to:**

1. Interpret cost/benefit analysis
2. Interpret leading and lagging indicators (e.g., training metrics, safety initiatives, incident and injury rates)
3. Develop a safety business case for additional budget, resources, other support, etc. (e.g., use financial tools to make a case for investing in safety program or initiative)
4. Communicate safety on multi-employer/contractor worksites
5. Facilitate or lead safety meetings (e.g., agenda, review safety plans, safety stand-down, shift handover)
6. Communicate (internal) safety activities and performance (e.g., reports, initiatives, lessons learned, requirements) to management and personnel
7. Communicate (external) safety risks and performance information (e.g., reports, presentations, risk/incident plans) to key stakeholders (e.g., public safety organizations, regulatory agencies, community)
8. Write communications that promote safety objectives and activities (e.g., safety proposal development, risk management plans, noncompliance response)