



**NCSO<sup>®</sup> / NHSA<sup>™</sup>**

**S T U D Y G U I D E**

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## INTRODUCTION

Welcome to the BCCSA National Construction Safety Officer (NCSO®) / National Health and Safety Administrator (NHSA™) Study guide. This guide has been created to assist you with your preparation to write the national and provincial NCSO®/NHSA™ exams.

If you are reading this guide, it means you are on your way to have completed all of the required mandatory and elective training programs for NCSO®/NHSA™ and meet the experience requirements needed to apply for the NCSO® designation. You are ready to test your knowledge related to health and safety in the construction industry.

Let's have a look at how we can help you to prepare for your exams.

## Purpose of the Study Guide

### What is a study guide?

A study guide is a tool that helps organize the information you need to review to prepare for your exams. The guide assists with the following:

- Identification of resource materials
- Prioritizing the importance of each resource
- Review of each resource in an organized manner
- How to locate key information and ideas
- How to find and apply supporting evidence of key information i.e. examples or definitions
- Help you to understand how the exam is structured
- Explains what types of questions you will be asked
- What happens on exam day

This guide will only fulfill its intended purpose if you are committed to spending time and effort applying the recommendations it contains. It is designed to make “how” you study more effective. The guide will not contain enough specific information on health and safety to let you complete the exam successfully. That information can only be found in the resources materials.

Everyone has a different style of learning and study. How you understand, retain and apply information will make a difference in how you prepare for the exams. Knowing what environment supports your best learning potential is crucial. Once you identify how and where you learn best, you can use this guide to inform your preparation process.

### The 4 most common learning types are:

- 1) **Visual Learners** – like to visualize ideas and see the information presented in pictures or charts.
- 2) **Auditory Learners** – like to listen to information being presented. Verbal repetition is helpful.
- 3) **Reading / Writing Learners** – like to read information and then write out key points or answers.
- 4) **Kinesthetic Learners** – hands on, experiential learners. They learn best by doing practical skills.

**1) Visual Learners may:**

- Take notes during lectures
- Underline, highlight, or circle printed material
- Create cue cards, posters or flowcharts of key concepts
- Draw pictures in notes to illustrate ideas
- Use a variety of colors - pens, highlighters, note cards, tabs etc.
- Underlined material to reinforce learning
- Watch videos or demonstrations of skills
- Enjoy presentations performed by groups where they do not have to participate directly

**2) Auditory Learners may:**

- Study with others and discuss key points
- Use a small tape recorder to capture lectures or study group discussions
- Reduce lecture notes to key points and put them on tape
- Read the information out loud or have a partner read the information
- Listen to an audiotape lecture or podcast while driving
- Choose to study in a quiet environment alone without device (TV / stereo) distractions
- Have a scheduled study group that meets twice a week in a classroom type setting

**3) Reading / Writing Learners may:**

- Take detailed notes during lectures and courses
- Reorganize text or paragraphs to paraphrase information
- Turn visual aids (handouts / flowcharts) into written statements
- Make lists based on materials and do comparisons
- Rewrite notes, single words, or sentences out over and over (repetition is key)
- Read materials several times
- Create multiple choice questions from the materials to practice

**4) Kinesthetic Learners may:**

- Avoid taking detailed notes and opt to use their "senses" to absorb the information
- Use case studies and "real life" examples to highlight key concepts
- Participate in activities or hands-on lessons to apply skills
- Engage in roleplay to experience the information
- Look at pictures or diagrams and explain to someone else what they understand is happening
- Apply trial and error when testing their knowledge
- Take field trips to see the concept in action

Once you identify your style of learning you can create a study plan including when, where, and how you will review the resource materials. Having a study plan allows you to commit specific times and activities to your exam preparation and will help you stay focused. The plan functions like a calendar; there are many different templates you can find online or create one for yourself. A sample plan is included in the appendices.

**Example entries in a study plan:**

Tues, March 5, 7:00pm to 9:00pm – study group (Brian’s house) - bring LSE Student Guide and notes

Thurs, March 7, 1:30pm to 2:30pm – self-study at home; WHMIS Train the Trainer Classification Module

Sun, March 10, 8:00am to 10:00am – partner study with Anne - review hazard assessments

If you know you work best in a quiet environment you may purposely schedule all your study time for when you have the house to yourself. If you need a “sounding board” or discussion with others to confirm your understanding, working with a partner or group is recommended. Regardless of what works best each of these scenarios will fit into your life differently based on your schedule and work / family commitments. Make studying a priority and schedule it accordingly. Effective planning is essential when working as a safety professional; it will also help you do well on your exams!

Another aspect of study preparation is knowing where your knowledge base is strongest and weakest. When your knowledge of a subject is limited you will benefit from focusing your study on understanding key concepts, definitions and applications. It is recommended to spend twice as much time on unfamiliar topics. This does not mean you should neglect to study topics you can communicate effectively; it is always possible to improve your understanding. Effective studying is about prioritizing your time and effort for a positive outcome. In the Examination Resources section an overview of the resources and how to focus your studies will be presented.



## **Purpose of Examination**

The purpose of the NCSO®/NHSA™ examinations is to confirm you comprehend key health and safety concepts and can apply your knowledge in both general and specific situations related to industry. There are two separate exams, provincial and national, with each having a slightly different purpose.

### **NCSO®/NHSA™ National Exam**

The national exam is intended to test your knowledge of health and safety fundamentals. The core concepts of risk assessment, hazard assessment, controls, training, and documentation are critical to successful safety cultures and programs in the workplace. They do not differ from province to province or territory. A safety professional must be intimately familiar with this information and the application of the assessments.

### **NCSO®/NHSA™ Provincial Exam**

There are fourteen jurisdictions within Canada, one federal, ten provincial and three territorial and each is governed by different occupational health and safety legislation (CCHOS website 1997-2017). Due to the differences between these jurisdictions each province or territory has an exam specific to their OHS Act and regulations. This ensures that the NCSO®/NHSA™ is familiar with the provincial legislation they will use to create, implement and enforce their safety program. The exam will test your ability to locate and explain regulatory requirements related to case studies or activity specific questions.

While you do not need to be a subject matter expert, you should be familiar with the industry specific activities listed as elective training on the BCCSA website for the NCSO®/NHSA™ program. The provincial exam will have questions related to the courses listed and the more exposure you have to the subject matter or how to locate regulatory specifics the easier the exam will be.

## EXAMINATION STRUCTURE

This section focuses on how the exams are structured including an overview of the exam topics and types of questions you will be asked. Exams are created with the objective of confirming transfer of knowledge between the resource and the student. The objective of the NCSO®/NHSA™ exams are to confirm your understanding of occupational health and safety related to construction.

### Exam Descriptions

The national exam focuses on 9 different topics. The exam consists of 120 multiple choice questions. The highest possible score for the exam is 120 marks.

The provincial exam consists of multiple choice, multi-select and matching questions. The exam has 50 different questions. The highest possible score for the exam is 50 marks.



### Multiple Choice

Multiple choice exams are the most common format of testing used today. This type of question is used to determine if you are able to identify the “right” or “best” answer out of a list of choices based on your knowledge of the subject. These types of questions are typically short and are meant to focus on a single idea or step in a broad range of topics. Even though two or more of the answer options will appear plausible there will be a clear “best” answer which does not require explanation.

### Examples of multiple choice questions:

**Which major legal document describes not only the authority for making health and safety laws but also specific health and safety requirements?**

- a) Hazardous Products Act
- b) Workers Compensation Act**
- c) Certificate of Recognition
- d) Canadian Standards Act

**Which of the following is NOT a step in field level risk assessment?**

- a) Stop and Think
- b) Walk the Talk**
- c) Identify Hazards
- d) Assess Risks
- e) Control Risks
- f) Resume Work

**Which one of the following organizations creates industry standards for fall protection?**

- a) BCCSA
- b) WorkSafeBC
- c) CSA**
- d) CCOHS

Multiple choice questions are a percentage game. If a question has four options in the answer list than, without any knowledge of the subject matter, you still have a 25% chance of answering correctly. With this type of question, you either know the right answer or may see which options are the “distractors”. If you can remove two options out of four as incorrect or unlikely than your percentage of being correct increases to 50%.

Multiple choice questions can be difficult if you struggle with English literacy. This is usually due to the way the question is worded. The best approach to these questions is to cover the options and try to answer the question without looking. If your answer is on the list than you can choose it and move on. If your answer is not there then reread the question. Often, when read a second time, it is discovered that key words in the question were missed. In both NCSO®/NHTSA™ exams, multiple choice questions are used to assess your knowledge on every topic.

### Providing Proper / Full Answers (Basic Anatomy of a Question)

In order to maximize your potential marks, you must be able to properly answer the question being asked. The ability to answer a question well comes from understanding the basic anatomy of the question i.e. what is the question asking specifically?

Always look for the key word(s) in the question. How do you know which ones are the key words? They will be the ones that the question could not exist without. Let's look at the following example:

#### Which of the following is NOT primarily the responsibility of the Supervisor?

- a) Establish a safe work plan
- b) Detect troubled workers
- c) Coordinate health & safety activities with the site owner, prime contractor and other employers on site
- d) Investigate incidents

The above question is asking about Supervisor responsibilities. Let's highlight the key words:

Which of the following is **NOT** primarily the **responsibility** of the **Supervisor**?

If we were to reduce the question to its basic anatomy it could read as:

#### NOT responsibility of Supervisor?

The addition of words like "primarily" and "of the following" makes the question sound better but will not influence your choice of answer. This is called "dressing the question". Key words will always identify the subject matter. When words such as "not", "never", "always" or "must" are used in a question they leave no room for options; the answer will be cut and dry. When words like "may", "could", "might" are used then the answer will have some flexibility or possibly more than one correct response.

## Overview of Topics

The topics covered on the national exam include:

- Hazard Control
- Investigations
- Health and Safety Program
- Auditing
- Training
- Inspections
- WHMIS 2015
- PPE
- Emergency Response

The topics being tested on the national exam are related to the creation, implementation, functionality, enforcement, audit and revision of safety management systems. There is a focus on foundational health and safety concepts:

- How the processes / assessments function are applied (hazards / risks / controls / inspections / investigations)
- System and program regulatory requirements ( emergency preparedness / WHMIS)
- Who is responsible for the system (owner / management / supervisor / worker)
- Due diligence (training / documentation / adopted standards)
- How to confirm the system is working (audits / auditing processes)
- Legal implications (Criminal Code)

You should be able to explain the purpose of each topic including a description of how the information fits into a safety management system. For certain topics i.e. health & safety program, it is essential you can list every element and give an example when possible. It is expected that an NCSO® is well versed in the information contained in the core courses including Leadership in Safety Excellence and Principles of Health & Safety Management.

The topics covered on the provincial exam include:

- Rights and Responsibilities
- Acts / Regulations / Guidelines
- Fall Protection / Ladders / Scaffolds
- Excavation / Trenching / Utility Locating / Demolition
- Noise / Vibration / Temperature / Ergonomics
- WHMIS
- Electrical
- Confined Spaces
- Cranes / Rigging
- Personal Protective Equipment (PPE)
- Joint Health and Safety Committee (JHSC)
- Traffic Control
- First Aid

The provincial exam topics are focused on the contents of the Workers Compensation Act (WCA) and British Columbia Occupational Health and Safety Regulation (OHSR). Many questions will need you to refer to regulations as they apply to the specific hazard or subject. Ensure that you are familiar with the Divisions in the WCA and the Parts in the OHSR. It is recommended to practice “speed locating” Regulation related to the above topics.

As fall protection and first aid are compulsory courses it is highly recommended that you have sound theoretical understanding of both these programs i.e. fall protection calculations, fall protection critical equipment (anchor / lanyard / harness) information, employer requirements for first aid coverage, first aid reporting etc. Make sure you review your manuals and don't be afraid to ask for assistance from your training provider, instructor or the BCCSA as needed.

If you review your resource materials, focus on the above mentioned topics and practice each self-test in the manuals, you will be well prepared for the exam and likely achieve a successful outcome.

## EXAMINATION RESOURCES

In order to be accepted to write the exam for the NCSO®/NHSA™ designation, you must have completed all the compulsory and elective training as identified in the NCSO®/NHSA™ Terms of Participation (See Appendix).

There are 10 compulsory courses. 8 of the courses are provided by BCCSA specifically; the other 2 programs can be completed through BCCSA approved training providers:

### BCCSA Specific Core Training

- Leadership for Safety Excellence (2 days)
- BC Construction Safety Legislation and Administration (2 days)
- Principles of Health and Safety Management (PHSM) – Online (4 to 6 hours)
- COR® Internal Auditor Training (Prerequisite: PHSM) (2 days)
- WHMIS 2015 Train the Trainer (1 day)
- Principles of Injury Management (1 day)
- SiteReadyBC - (Online) (4 to 6 hours)
- Train the Safety Trainer - (1 day)

### Compulsory Training offered by an Approved Training Provider (See NCSO® Terms of Participation)

- Occupational First Aid (OFA) Level 1
- Fall Protection

### National Exam - General Resources

The best resources to use to prepare for the national exam are the materials from the eight BCCSA specific training courses as listed above. You either received these as hardcopy student manuals or online modules you can access through the BCCSA Online Training Portal.

It is recommended to focus initially on the contents of the Leadership for Safety Excellence (LSE™), Principles of Health and Safety Management (PHSM), BC Construction Safety Legislation and Administration and COR® Internal Auditor Training programs as they contain the foundational curriculums. Once you feel comfortable with these resources you can refine your studies by reviewing SiteReadyBC, WHMIS 2015 Train the Trainer and Principles of Injury Management materials.

Contained within these resources are referrals to other sources of health and safety information including WorkSafeBC and the Canadian Center for Occupational Health and Safety (CCOHS). You can find helpful publications and samples of safety documentation on their websites:

WorkSafeBC | [www.worksafebc.com](http://www.worksafebc.com)

Canadian Center for Occupational Health and Safety (CCOHS) | [www.ccohs.ca](http://www.ccohs.ca)

It is vital to accept that a national exam, which must meet the standards of every province and territory, can require you to recognize certain terms or descriptions of fundamental safety processes and practices that differ from region to region. What we describe in British Columbia as an “immediate” cause related to an accident / incident occurrence may be described as a “direct” cause in another province. When reviewing your resource materials and external sources be vigilant for such differences.

## Provincial Exam - General Resources

The provincial exam is specific to British Columbia and our legislation as it relates to health and safety. While core curriculum familiarity is essential to answering some of the questions on this exam it is crucial that you are able to locate and apply the legislation from the Handi-guide.

The exam contains questions related to the two compulsory courses which are offered by BCCSA approved training providers:

- Fall Protection
- OFA Level 1

There will also be questions specific to all of the 5 elective courses offered, including:

### BCCSA Specific Elective Training

- Standardized Traffic Control Training I

### Elective Training offered by an Approved Training Provider (See NCSO®/NHSA™ Terms of Participation)

- Utility Locating Specialist Training
- Confined Space Entry/Monitor
- Respiratory Protection and Fit Tester
- Transportation of Dangerous Goods

While it is a good idea to take more than 2 electives, it is not required for the exam. There are topics from these courses which are covered, but they pertain to the Act or Regulation and students can derive their answers from the Handi-Guide.

## Course Review

Out of the 10 compulsory courses, these 6 programs are considered to be the core courses for the NCSO® designation:

- Leadership for Safety Excellence (LSE™) (2 day)
- BC Construction Safety Legislation and Administration
- Principles of Health and Safety Management (PHSM)
- COR® Internal Auditor Training / the COR® National Audit Instrument
- Train the Safety Trainer
- WHMIS 2015 Train the Trainer

These courses contain the essentials or “core concepts” on which the construction safety officer training is based. Each of these programs define the roles and responsibilities of safety personnel in industry and how they can achieve safety excellence. Let’s look at each of the programs and where they are focused:

### Leadership for Safety Excellence

This course introduces the basic concepts of health and safety — the things participants will need to know so that their company can set up an excellent health and safety program and get the most from participation. It is designed for people who are responsible for health and safety in their organizations. This course introduces leading edge practice in health and safety and provides ideas and practical tools to take back to the workplace and use right away.

**Module 1 / Supervisor’s Role:** This module will enable Supervisors to build health and safety into their everyday planning, create and promote a safe work environment where people can work safely, and help make a lasting contribution to the reduction of incidents in the industry.

**Module 2 / Hazard Assessments:** This portion of the course is intended to help participants conduct effective safety inspections. Participants will learn what to look for, how to interpret what they see and how to document the conditions they find. This module will enable participants to correct hazards and also help them think about how to resist pressures to compromise safety standards.

**Module 3 / Inspections:** This portion of the course is intended to help participants conduct effective safety inspections. Participants will learn what to look for, how to interpret what they see and how to document the conditions they find. This module will enable participants to correct hazards and also help them think about how to resist pressures to compromise safety standards.

**Module 4 / Investigations:** This module will help participants understand when to investigate an incident and what steps to follow. This material includes guidelines for what kinds of information to gather, how to interview people effectively, and what conclusions to present in investigation final reports.

**Module 5 / Training:** This module is focused on Supervisor’s responsibility to provide their workers the training they need in order to do their jobs properly, and to maintain high safety standards on the worksite. It will help Supervisors understand what the expectations are for training delivery in the construction industry. It outlines the elements of a good training program and what the program should accomplish. The module sets out the steps in designing and presenting effective training sessions to help participants in this important supervisory function.



### BC Construction Safety Legislation and Administration

This course is designed for owners, supervisors, joint occupational health and safety committee members, safety administrators and those pursuing the National Construction Safety Officer (NCSO®) designation, or National Health and Safety Administrator (NHSA™) designation. The class explains BC's OHS legislation as it pertains to construction safety and explores the roles and responsibilities of a construction safety professional in program administration and communication. Participants will work on practical exercises that increase their familiarity with the Workers Compensation Act (WCA), OHS Regulation and technical communication skills that are essential to this role.

#### Course Topics

- Identify and explain relevant components of BC's OHS legislation
- Explain the purpose, value of codes, bylaws, authority and associations in BC
- Identify communication barriers and solutions in the workplace
- Learn, discuss and practice writing technical communications
- Analyze injury data using the incident calculator

### Principles of Injury Management

This course introduces the practices used in an injury management system. It explains how to build proactive and responsive approaches to assist injured workers to remain at work on possible modified duties or return to safe and productive work as soon as possible. This course will help participants control injury costs and provides them with effective tools for managing compensation and business costs related to injured workers.

The course includes information and guidance on how to:

- Recognize the benefits of injury management
- Identify the elements of successful injury management programs
- Identify the steps in developing an effective injury management program
- Develop a plan for an injury management program at their workplace

Developing an injury management program takes preparation and planning but the benefits can outweigh this. Participants can make a difference by taking action in order to control claims costs and create and maintain a safer work place for all.

### Principles of Health & Safety Management (PHSM)

This online course provides guidance and instruction on developing a written Health & Safety program. The course material contains simple policies, forms, and checklists that can be tailored into a company Health & Safety manual. PHSM is a co-requisite for individuals seeking a COR Internal Auditor certificate.



### COR Internal Auditor Training

This course introduces the concepts of health and safety program auditing and provides comprehensive information on the Certificate of Recognition program and the certification process for companies seeking COR® certification.

The content of this program includes:

- Overview of elements of a health and safety program
- Types of Audits
- Audit preparation
- Auditor verification techniques: Documentation review, Site observation and Interviews
- The National COR® Audit Document: How to complete the audit instrument
- The development of the audit report including: audit executive summaries and action plans

### Train the Safety Trainer

This course provides assistance with the planning and delivery of safety training. Ideas and strategies are presented that create a basis for making sound decisions in training settings. The emphasis in this course is on the development of practical skills that can be used in the classroom or work setting. This course will enable participants to:

- Design a training session and use media in instruction
- Conduct a lively interactive training session
- Select appropriate instructional strategies and learning activities
- Use effective visual materials
- Deliver instruction in a supportive environment

### WHMIS 2015 Train the Trainer

This course is designed for individuals who are responsible for providing WHMIS training and/or establishing and maintaining their company's WHMIS program. The course summarizes key changes from the original WHMIS program, describes the three main elements of WHMIS (labels, safety data sheets, and education and training programs), and outlines the responsibilities of suppliers, employers, and workers for these elements. It offers useful information about the kinds of hazards and chemical characteristics of products covered by WHMIS.

Pre-requisite Training

- WHMIS training and / or a current WHMIS certificate

Course Topics

- Relevant legislation (GHS changes)
- Worker training (strategies to develop and incorporate site-specific training)
- Classification of hazardous products (hazard groups, classes and categories)
- Communication medias (SDS, labels)
- Communication elements (signal words, hazard and precautionary statements, pictograms)

This guide contains a core course matrix which has been designed to help you easily locate the essential information you need to review. It is organized by resource and exam topic and identifies which materials contain information specific to the topics. The next section reviews some of the specific ideas and definitions you need to know which are located in these core programs.

## Electives

There are 7 electives available through BCCSA and their authorized training providers which are part of the NCSO® designation program. These are the courses and the parts of the OHSR that you need to review in detail in order to prepare for exam (other OHSR parts may contain information relevant to these topics but the core information is contained in these parts as listed).

BCCSA Standardized Traffic Control Training ..... (OHSR Part 18)

Utility Locating Specialist Training ..... (OHSR Part 20)

Confined Space Entry/Monitor ..... (OHSR Part 9)

Respiratory Protection and Fit Tester ..... (OHSR Part 8)

Transportation of Dangerous Goods ..... (OHSR Part 5)

As stated earlier, it is highly recommended you complete as many of the electives as possible in order to be fully prepared for exam. The key terms and definitions related to these courses will be accessible in the OHSR but the application of the information and topic-specific learning objectives will be taught in the curriculums directly. If you need assistance in sourcing this information please contact BCCSA and / or an authorized training provider.

## Organizational Charts – Position & Responsibility

In the LSE™ course, we discuss the rights and responsibilities of the employer (owner), supervisor and worker as defined in the Workers Compensation Act (WCA).

**MANAGEMENT** is responsible for policies, procedures and purchases that promote health and safety. For example, management may make a decision to buy equipment and protective gear as needed. There must be authorization for regular maintenance and repairs to keep equipment in good running order. There must be a willingness to take the time necessary for proper hazard assessments, inspections, investigations, and safety audits.

Employers' responsibilities are to:

1. Establish a Health and Safety (H&S) Program
2. Show support and commitment (Leadership)
3. Provide a safe workplace
4. Maintain the H&S Program and enforce the health and safety policies
5. Ensure proper training of workers
6. Ensure required personal protective equipment (PPE) is available and used
7. Ensure regular inspections are conducted
8. Ensure investigations are conducted as required
9. Ensure first aid services are available
10. Review hazard assessments, inspections and investigations
11. Coordinate H&S activities with the site owner, prime contractor, and other employers on site
12. Ensure compliance with legislation
13. Report accidents and injuries to WorkSafeBC

**THE SUPERVISOR** is the one who brings it all together on the job site and ensures that the company's health and safety program is implemented. Some job sites have safety supervisors such as Construction Safety Officers, but they can only be in one place at a time. The real key to the success of the health and safety program at your job site is the supervisor. You are responsible to see that acts and conditions on the worksite are up to standard.

Supervisors' responsibilities are to:

1. Promote health and safety awareness through hazard assessments
2. Establish a safe work plan
3. Instruct workers – “the safe way”
4. Reinforce safe behaviour
5. Detect troubled workers
6. Correct unsafe acts and conditions
7. Assess and correct hazards
8. Enforce safety rules
9. Ensure proper equipment/tool use and maintenance
10. Investigate incidents
11. Comply with legislation
12. Set a good example

**WORKERS** are responsible for making sure that the work they do is in accordance with all applicable site rules, practices, procedures and regulatory requirements. That means doing their work safely and reporting unsafe acts and conditions so that they can be corrected. Workers must know and believe that safety is important to the company. They have to know that management will support them if they make a decision in the interest of improved health and safety.

Workers' responsibilities are to:

1. Follow safe work procedures
2. Report unsafe conditions
3. Report unsafe practices
4. Comply with rules and requirements
5. Report accidents/incidents
6. Make safety suggestions
7. Set a good example

In the WCA Part 2 Division 4 Section 25, the roles and general duties of an **OWNER** are described:

**25** Every owner of a workplace must:

- a) Provide and maintain the owner's land and premises that are being used as a workplace in a manner that ensures the health and safety of person's at or near the workplace.
- b) Give to the employer or prime contractor at the workplace the information known to the owner that is necessary to identify and eliminate or control hazards to the health and safety of persons at the workplace.
- c) Comply with this Part, the regulations and any applicable orders.

On the exams there will be questions directly related to the responsibilities of persons at each level of a company. You must be able to determine what rights and responsibilities are assigned to these individuals and the tasks that they will be accountable for.

## STUDY ESSENTIALS – WHAT YOU NEED TO KNOW

The following sections outline the basic information – key terms, definitions, acronyms and terminology you need to know to be ready to write your exam. Much of this information is located in your compulsory course student manuals and is an overview of the contents of the definitions and glossary sections of those materials.

### Key Terms & Definitions

What is a definition and why is it important to know them related to our safety training?

In its very basic form a definition “defines” something. To define means:

*To state or set forth the meaning of (a word, phrase, etc.) or to explain or identify the nature or essential qualities of; describe.*

When we know the meaning, nature or quality of a safety practice, idea or process and can explain or provide an example, we are able to apply the knowledge. We will get results because we can interpret the facts and arrive at a corrective action or solution. Often safety is complicated by terminology. When we simplify a statement or idea it makes it easier to share and receive acknowledgement and support. If we think of safety as a language our objective is to make it easy to learn so everyone speaks it.

Some of the safety words, terms and ideas you need to know the definition of for the exam include:

### LSE Manual Definitions

**Accident** - An unplanned, undesired event that results in property or equipment damage, injury, death or occupational illness.

**Accident Investigation** - The determination of facts of an accident by inquiry, observation and examination.

**Audit** - An evaluation of a health and safety program measuring its effectiveness and efficiency against given standards. It helps enable the company to improve its health and safety program.

**Excavation** - Any cut, cavity, trench or depression in the earth’s surface resulting from rock or soil removal.

**Follow-Up** - The term used to indicate an action (usually hazard control) that should take place based on the recommendations in accident/incident reports and hazard assessments.

**Hazard Assessment** - An evaluation used to assess & document hazards, prioritize them & determine hazard controls.

**Hazard Recognition** - Seeing or becoming aware of a hazardous situation or condition.

**Health & Safety Program (also - Occupational Health & Safety Program)** - A structured program containing specific elements that is aimed at reducing incidents and costs, resulting in a safer place of employment.

**Health & Safety Rules** - An internally developed set of standards regarding policies and requirements for safety and general workplace conduct.

**Immediate (Direct) Causes** - The harmful transfer of energy that causes the injury, illness or property damage. The energies can include acoustic, chemical, electrical, kinetic, mechanical, potential, radiant, and thermal.

**Intermediate (Indirect) Causes** - The hazards that existed immediately prior to the incident that lead up to the Immediate Causes. They can be thought of as the unsafe conditions and unsafe practices that existed due to deficiencies in the Safety Management System, i.e., the Root (Basic) Causes.

**Incident** - An occurrence which resulted in or had the potential for causing an injury or occupational disease or damage to anything in the work or external environment. (Includes both Accident and Near Miss).

**Incident Investigation** - The finding of the facts about an incident by inquiry, observation and examination.

**Incident Records** - Recorded information (reports and record books) detailing what incidents, injuries, occupational illnesses or damages occurred.

**Inspection (Safety Inspection)** - The act of examining worksites and/or equipment, and comparing conditions and activities observed against standards. Inspections identify hazards and determine if safety legislation and health and safety policies are being followed by looking for unsafe practices and conditions. The inspection should also be used to reinforce and promote safe work practices.

**Inspection Report** - A document containing the findings of an inspection. Causes and preventive measures are identified.

**Investigation Report** - A document containing the information and facts about a specific incident. The events are put into chronological order to give a complete picture of what occurred. Causes and preventive measures are identified.

**Joint Health & Safety Committee (JHSC)** - A group comprised of management and worker representatives that work together to identify deficiencies in the safety management system, and then recommend solutions to correct identified deficiencies. The JHSC plays a key role in the development, implementation, and maintenance of a health and safety program.

**Lockout** - A positive method for disconnecting power (or an energy source), or making machinery, equipment or a process inoperative. Normally, this is done with locks attached to electrical plugs, breakers or switches, control units, valves, or levers. The person placing the lock at the lockout point must be identified. A numbered tag can also be affixed to the lockout point showing the reason for the lockout, the date and the worker's name.

**Lockout Procedure** - A written procedure describing step-by-step how the positive locking out of equipment, machinery or a process is to be done.

**Near Miss** - An incident that did not result in an injury or property damage, but which under slightly different circumstances could have.

**Occupational Health & Safety Regulation (OHSR)** - The BC health and safety regulatory requirements under the Workers Compensation Act (WCA). Infractions can result in orders to comply, partial or complete workplace closures, and fines (penalty assessments) or prosecution that can result in fines and/or imprisonment.

**Occupational Illness** - Physical condition or medical disorder caused by exposure to workplace environmental factors such as silica, dusts, heat, cold, hazardous materials, etc.

**Personal Protective Equipment (PPE)** - Protective gear designed to reduce or eliminate injuries to a worker. Basic PPE includes steel toed boots, gloves, hard hats, safety clothing and safety glasses. This is the last line of defense.



**Policy** - Written statement that expresses the wisdom, philosophy, experience and or belief of an organization's senior management and guides actions.

**Qualified** - Being knowledgeable of the work, the hazards involved and the means to control the hazards, by reason of education, training, experience or a combination thereof. (BC OHSR)

**Risk** - The chance of loss based on exposure to a hazard, probability of occurrence, and the resulting consequences of exposure to the hazard.

**Root (Basic) Causes** - The deficiencies in carrying out safety policies, programs, plans, processes, procedures or practices that allowed the intermediate and immediate causes to exist. Root causes are often the result of:

Inadequate system to control hazards through activities such as safety leadership, training, planned inspections, maintenance, hazard analysis and procedures, incident investigation and analysis, emergency preparedness, and/or rules and procedures. Inadequate performance standards that are not specific enough, not clear enough and/or not high enough. Inadequate compliance with standards because standards are not communicated and/or enforced.

**Rule** - Can be defined as:

- a) Prescribed for conduct or action, or
- b) A bylaw governing procedures or controlling conduct, instituted by the organization involved.

**Safe Job Procedures** - A written, specific step-by-step description of how to complete a job safely and efficiently from start to finish.

**Safe Work Practices** - A set of positive guidelines or "Do's and Don'ts" on how to perform a specific task that may not always be done in a certain way.

**Safety Management System** - The planning, leading, organizing and controlling of activities at all levels in the organization necessary to achieve safety goals.

**Senior Management** - Personnel in a company or a department who directly control the overall operation of the company or department, and are in a position to make decisions for the entire company or department.

**Supervisor** - A person, who instructs, directs and controls workers in the performance of their duties. This includes foremen, supervisors, and superintendents; however, the function of supervision is independent of job title or position, i.e., persons who direct work are Supervisors.

**Unsafe Condition** - A condition in which something exists that varies from a normal, accepted safe condition and, if not corrected, could cause injury, occupational illness, and death or property damage.

**Unsafe Practice** - The actions of a person in a manner which varies from the accepted or legislated safe practice, and which creates a hazard with potential for injury, occupational illness, death or property damage.

**Workers Compensation Act (WCA) BC** - The cornerstone legislation that specifies health and safety regulatory requirements in BC. It is administered by WorkSafeBC. Part 3 of the WCA specifies occupational health and safety requirements.



## COR® Internal Auditor Manual Definitions

**Auditee** - The company being audited.

**Auditor** - An individual who has the qualifications and skill set to measure health and safety performance against a given standard.

**Certificate of Recognition (COR®)** - An accreditation given to an employer's health and safety management system that has been evaluated by a certified Auditor.

**Company Rules** - Company directives that govern and control conduct and action at the workplace. These rules are basic written statements that dictate acceptable behavior and leave no room for discretion or argument. Also referred to as safe work rules.

**Company Health & Safety Policy** - A current written statement(s) of Senior Management's philosophy, principles, and goals embodying the company / employer's commitments to workplace health and safety. Section 3.3(a) of the OHSR references "a statement of the employer's aims and responsibilities of the employer, supervisors and workers."

**Critical Task** - A task that has the potential to produce major loss to people, equipment, process or the environment.

**Due Diligence** - In legal terms, this is the requirement of a company / employer to provide safe work conditions through taking reasonable steps to prevent incidents from occurring.

**Documentation, Observations and Interviews (DOI)** - These are the techniques used to verify the effectiveness of a health and safety program (also referred to as verification techniques)

**Employee** - An individual who works for an employer or organization and is compensated for their services. This person may be full-time, part-time or retained on a contractual basis and is insured under the company's WorkSafe BC account.

**Hazard Controls** - These are the measures put into place to protect workers from known hazards. The typical hierarchy of control measures are elimination, substitution, engineering, administrative and as a last line of defense, personnel protective equipment. An accumulation of all tasks involved in the worksite.

**Job** - A segment of work, a specific work assignment or a set of actions required to complete a specific work objective.

**Job Hazard Analysis** - The process of evaluating a specific task (job) to identify all hazards or potential hazards that the individuals performing the job (task) may be exposed to.

**Management** - Those people that have some level of authority, responsibility and accountability within the firm.

**Manager** - An employee of a company who is responsible for planning, or directing a department or a group of individuals and monitoring their work. Managers have the authority to change the work assignments of staff and have some control over resources and expenditures. They are responsible for ensuring the company or department is complying with the OHSR and other applicable safety legislation.

**Meetings** - Meetings may include but are not limited to JHSC meetings, toolbox talks, management meetings and informal safety meetings. They may or may not include an agenda but should include a record of attendance.

**Prime Contractor** - The contractor, employer or other person who enters into an agreement with the owner of the work site to be the prime contractor. The prime contractor has the overall responsibility for health and safety on the worksite.

**Senior Management** - See LSE™ definition above. In addition (for COR® audit purposes) - personnel in a company who directly control the overall operation of the company or a division / department within a company. They are responsible for ensuring the company or division / department is complying with the OHSR and other applicable safety legislation. Senior management may be appointed by a board of directors and / or approved by shareholders.

**Subcontractor** - Subcontractors are not limited to trade contractors and may include delivery people, traffic controllers, service technicians, first aid, temporary labor and cleaning services.

**Supervisor** - See LSE™ definition above. In addition (for COR® audit purposes) – means any person having authority, in the interest of the employer, to exercise independent judgement, and who is also responsible for working with management in complying with the OHSR and other applicable safety legislation.

**Worker** - An individual employed by a company, whether full-time, part-time, volunteer or on a contractual basis. Workers may include owners, management and subcontractors; for the purposes of the COR® audit this term will be used to define individuals that do not have management or supervisor responsibilities.

**Workplace** - Any place where a worker is or is likely to be engaged in any work. This includes any vessel, vehicle or mobile equipment used by a worker in work. Also referred to as a worksite.

**WorkSafeBC** - A provincial organization that regulates workplace safety. Also known as the Workers Compensation Board (WCB) of British Columbia.

## Principles of Health & Safety Management Definitions (PHSM) Online Access

**Competent** - Having the necessary ability or skills.

**Frequency** - Is how often a person would be exposed to a given hazard.

**Health & Safety Activity Summaries** - These include information that can help companies measure, review and address health and safety concerns at the workplace. These summaries may include:

- Injury statistics
- Near miss reports
- Injury reports
- Safety meeting minutes
- Inspection and hazard reports

Summaries are not limited to internal information. Companies may find it beneficial to review provincial or national reports on health and safety matters.

**Lagging Indicators** - Measure the end result of OHS processes, policies and procedures. They're a record of things that have already happened. Since they record things after the fact, they inform a reactive health and safety culture

**Leading Indicators** - Focus on future health and safety performance with the intent of continuous improvement. They are a signal and monitor of what is being done on an ongoing basis to prevent worker illness and injury.

**OHS Integrity** - Alignment between an organizations stated priorities, procedures and actions

**Performance-Based** - A requirement stating desired results or outcomes.

**Prescriptive-Based** - A requirement stating specific actions.

**Severity** - Is the level of harm that could reasonably be expected to be inflicted in the case of an occurrence.

**Terms of Reference** - A description of the objectives and structure of a meeting, committee, project, etc.

**Training** - A process by which someone is taught the skills that are needed for an art, profession, or job.

## WHMIS 2015 Train the Trainer

**Acute Exposure** - A single exposure or exposure over a short time.

**Acute Toxic Effects (acute toxicity)** - Effects that take place after a single exposure or after a short series of exposures within 24 hours.

**American Conference of Government Industrial Hygienists (ACGIH)** - International association of occupational hygienists that develops many guidelines for the practice of occupational hygiene. One of the most important of these guidelines is Threshold Limit Values and Biological Exposure Indices. This publication serves as the basis for occupational exposure limits in many jurisdictions around the world.

**Aspiration Hazard** - Aspiration means the entry of liquid or solid chemical directly through the oral or nasal cavity, or indirectly through vomiting, into the trachea and lower respiratory system.

**Auto Ignition Temperature** - The lowest temperature at which a substance ignites when no spark or flame is present.

**Boiling Point** - Temperature above which a substance boils. Vapour is given off very rapidly at temperatures above the boiling point.

**Chemical Abstract Service (CAS) Registry Number** - A unique reference number used when searching for information about a particular chemical.

**Chronic Exposure** - An exposure to a low concentration of a substance over an extended period of time.

**Chronic Toxic Effects (chronic toxicity)** - The effects that occur after chronic exposure or that occur a long time after exposure.

**Combustion Product** - A product formed when a material is burned.

**Complex Mixture** - A mixture that is a combination of many chemicals, has a commonly known generic name and is any of the following: naturally occurring, a fraction of a naturally occurring mixture that results from a separation process, a modification of a naturally occurring mixture, a modification of a fraction of a naturally occurring mixture that results from a chemical modification process.

**Condensation** - A type of chemical reaction in which water is formed as a by-product.

**Conditions of Flammability** - A subsection of the WHMIS SDS that describes conditions under which a product will become flammable. These conditions could include pressure, heat, vibration, jarring or the presence of moisture or air.

**Conditions of Reactivity** - A term on the WHMIS SDS that describes conditions under which two or more materials will react together. These conditions could include the presence of light, elevated temperatures, aging or the absence of an inhibitor.

**Cumulative Toxic Effects** - The effects that usually occur after long term exposure to a substance. Individual exposures occur many times and the effects accumulate. Even very small individual exposures may result in a toxic effect.

**Cut Off Concentration** - The minimum concentrations for a substance (either as additive, impurity or an individual constituent of mixture) to be taken into account for classification purposes.

**Date of Preparation** - The date included on the WHMIS SDS to indicate the date when the sheet was last updated.

**Decomposition** - The breakdown of a material into two or more different materials.

**Edema** - An accumulation of fluid in body tissues (commonly referred to as swelling).

**Engineering Controls** - A subsection of a WHMIS SDS that includes measures for eliminating or reducing chemical hazards to which workers may be exposed. Examples include: the substitution of less hazardous products, enclosure of processes to prevent the release of hazardous materials, or installation of local exhaust ventilation to remove air borne contaminants at their point(s) of generation.

**Erythema** - Patches of reddened, bumpy skin.

**Evaporation Rate** - A term on a WHMIS SDS that indicates how quickly a substance vaporizes compared with butyl acetate (the evaporation rate of butyl acetate is 1). Substances with a high evaporation rate mix with air very quickly.

**Fire & Explosion Data (sensitivity to impact & static electricity)** - A term on a WHMIS SDS to indicate whether a product will explode if it is jarred or scraped or exposed to static electricity.

**Exposure Limits** - The concentrations of airborne chemicals and materials that worker exposure may not exceed. Exposure limits have various names and often have different numerical values in different jurisdictions. In BC these limits are called Occupational Exposure Limits (OELs).

**First Aid Measures** - A subsection of a WHMIS SDS that describes the main first aid actions to be taken if a worker is seriously overexposed.

**Flash Point** - The lowest temperature at which a product gives off enough vapour to catch fire when the vapour is exposed to a source of ignition. The lower the flash point, the greater the potential fire hazard. The SDS must note beside the flashpoint value the test method used to determine the flashpoint.

**Freezing Point** - The temperature below which a liquid material becomes solid. It is identical to the melting point, which is the temperature above which a solid material becomes liquid.

**Generic WHMIS Worker Education** - The component of the WHMIS worker education program that includes a general introduction to WHMIS, training in the required content of WHMIS labels and SDSs, and training in the purpose and significance of that information to workers' health and safety on the job.

**Handling Procedures/Equipment** - A subsection of a WHMIS SDS that describes the basic precautions to be followed when handling a controlled product, or the basic equipment to be used during handling. Hazard information is the information on the safe use, storage and handling of a controlled product, including toxicological information.

**Hazardous Products** - Materials, products or substances that meet the criteria for one or more of the WHMIS product classes.

**Hazardous Products Act (HPA)** - Federal legislation that specifies suppliers' responsibilities regarding "prohibited products," "restricted products" and "hazardous products." WHMIS applies only to hazardous products.



**Hazardous Products Regulations** - Federal regulations that are written under the authority of the Hazardous Products Act. These regulations contain the details of suppliers' WHMIS responsibilities, including classification, supplier labels and WHMIS SDSs.

**Importer** - A person or company that brings a controlled product into Canada for sale to, or use at, a work site. Importers have the same WHMIS responsibilities as suppliers.

**Incompatible Substances** - Materials that, when combined with a specific product, cause: the production of toxic or corrosive materials, excessive heat or an explosion.

**Ingredient Disclosure List** - A list of 1,736 chemicals, any one of which, if present as an ingredient in a controlled product at a concentration greater than the cut off concentration specified on the list, must be revealed on a SDS. The Ingredient Disclosure List is not a list of hazardous products. (There is no comprehensive list of hazardous products).

**Irritancy** - The ability of a product to cause local effects in the area where it contacts the body, such as the throat, eyes or skin. Effects could include redness, itching or swelling.

**Lethal Concentration 50 (LC50)** - The unit used for measuring the acute toxicity of inhaled chemicals. It represents the amount of a chemical that will cause death in 50 percent of a group of test animals. LC50 values are usually expressed as ppm (parts of chemical per million parts of air) or mg/m<sup>3</sup> (milligrams per cubic metre of air) for dusts, mists or fumes. LC50 values vary with the species of animal and the length of exposure. This information can be found in brackets beside the LC50 value, for example, LC50 = 2 ppm (mouse, 4 hours).

**Lethal Dose 50 (LD50)** - The unit used for measuring the acute toxicity of chemicals that enter the body through ingestion or skin absorption. It represents the amount of a chemical that will cause death in 50 per cent of a group of test animals. LD50 values are usually expressed in mg/kg (milligrams of chemical per kilogram of animal bodyweight). LD50 values vary with the animal species, the route of exposure and the length of exposure. This information can be found in brackets beside the LD50 value, for example, LD50=5mg/kg (rat, oral, 8 weeks).

**Lower Explosive Limit (LEL) or Lower Flammable Limit (LFL)** - The lowest concentration of a substance in air that will burn or explode when it is exposed to a source of ignition. At concentrations below the LEL, the mixture is "too lean" to burn or explode. The LEL is the same as the LFL.

**Odour Threshold** - The lowest concentration of a substance that most people can smell.

**Oil Distribution/Coefficient of Water** - The ratio of a product's distribution between the water and oil portions of a mixture of water and oil. A value of less than one indicates that the product is more soluble in oils. A value of greater than one indicates that the product is more soluble in water.

**Organic Peroxide** - A particular type of chemical. It is a very powerful oxidizer, highly self-reactive if heated or shocked, and very irritating to the skin, eyes, throat and respiratory tract.

**pH** - A measure of a substance's acidity or alkalinity. A pH of 7 is neutral. Substances with a pH of greater than 7 are alkaline (caustic). Alkalinity increases as the number increases. Substances with a pH of less than 7 are acidic. Acidity increases as the number decreases.

**Physical State** - An indication of whether a product is a solid, liquid or gas.

**Preparation Information** - A subsection of a WHMIS SDS that identifies the person or group who prepared the SDS and who is able to explain the information on the SDS or provide further product information if necessary. This section of the SDS must include a contact telephone number.

**Prohibited Products** - The products that may not be sold, advertised or distributed in Canada. These products are dealt with in Part I of the Hazardous Products Act. They are not addressed by WHMIS.

**Reproductive Toxicity** - A product's ability to affect the fertility of persons exposed to it. The effects include changes in sperm or ova, and miscarriages.

**Restricted Products** - The products that must be labelled in a particular way if they are to be sold in Canada. They are dealt with in Part I of the Hazardous Products Act. Restricted products that are packaged in sizes appropriate for the general public, labelled as required by the Consumer Packaging and Labelling Act and offered for sale in ordinary retail outlets are considered, for the purposes of WHMIS, to be "consumer products."

**Route of Entry** - The way a product enters the body. The most common routes for workplace chemicals to enter the body are inhalation, ingestion and skin absorption. Contact between a product and skin does not necessarily result in the body absorbing the material. The material could cause a chemical burn or a rash on the surface of the skin or eye and never enter the body.

**Sensitization** - A product's ability to affect the body's immune system so that further exposures at low concentrations may result in symptoms. These symptoms may be as minor as a slight irritation of the skin or as profound as severe respiratory distress. Different sensitizers cause different symptoms.

**Shipping Information** - Specific instructions on a WHMIS SDS for preventing the development of "conditions of flammability, instability or reactivity" during shipping.

**Site Specific WHMIS** - The portion of the WHMIS worker education program that includes hazard information applicable to the hazardous products they work with or near, and about work procedures applicable to those products.

**Spill/Leak Procedures** - The procedure describing the steps to be taken in the event of a spill or leak of the controlled product.

**Storage Requirements** - Specific instructions on a WHMIS SDS for preventing "conditions of flammability, instability or reactivity" to develop during storage.

**Supplier** - A person or company that manufactures, processes or packages a controlled product, or that sells or imports a controlled product.

**Threshold Limit Values (TLVs)** - Airborne concentrations of substances. TLVs represent conditions to which it is believed that nearly all workers may be exposed day after day without suffering adverse effects. The ACGIH developed this term.

**Toxicity** - A substance's ability to cause adverse health effects in persons exposed to it.

**Transportation of Dangerous Goods Legislation (TDG)** - Federal legislation that controls the conditions under which dangerous materials may be transported on public roads, in the air, by rail or by ship. Its purpose is to protect the health and safety of persons in the vicinity of transport accidents involving those materials.



**Upper Explosive Limit (UEL) or Upper Flammable Limit (UFL)** - The greatest concentration of a substance in air that will burn or explode when exposed to a source of ignition. At concentrations greater than the UEL, the mixture is "too rich" to burn or explode. The UEL is the same as the UFL.

**Vapour Density** - The weight of a vapour or gas compared to the weight of an equal volume of air. Substances with vapour densities greater than one sink and accumulate in low areas.

**Vapour Pressure** - The pressure exerted by the vapour formed over a liquid in a closed container under standard test conditions and reported as an absolute pressure. Vapour pressure increases as temperature increases until the criteria temperature is reached.

**Waste Disposal** - Describes effective and environmentally safe ways to dispose of waste that contains a controlled product.

The BCCSA resource manuals are just one source for many of the definitions that you will need to know throughout your career. In your BC Handi-guide both the WCA and the OHSR contain definitions.

In the WCA the definitions are found at the start of each Division. In the OHSR general definitions are found in Part 1. The definitions continue in the regulation at the beginning of each Part i.e. Part 5 Chemical Agents and Biological Agents in section 5.1 have definitions specific to this type of general hazard.

For each of the definitions included on this list or in your Handi-guide, attempt to locate an example or explanation, where applicable. This will assist you when answering a short answer or written response question. Sometimes the actual definition will be all the description you need to make your point or argument. If you can learn and retain the definitions listed above you will be well prepared to answer the questions on both exams.

## Terminology & Acronyms

Many of the most common international safety acronyms are listed below. Some of the terms or shorthand used is found in your resource manuals. While it is not necessary to memorize every single item on this list the more you recognize the better your comprehension of safety related communications will be.

**AED** – Automated External Defibrillator

**AIHA** – American Industrial Hygiene Association

**ACGIH** – American Conference of Governmental Industrial Hygienists

**ALARA** – As Low as Reasonably Achievable

**BCCSA** – BC Construction Safety Alliance

**BCRSP** – Board of Canadian Registered Safety Professionals

**CCOHS** – Canadian Centre for Occupational Health and Safety

**CFM** – Cubic Feet per Minute [A unit of measure of air flow which is used in evaluating ventilation systems]

**CIH** – Certified Industrial Hygienist

**CIHI** – Canadian Institute for Health Information

**CLC** – Canada Labour Code

**CNS** – Central Nervous System

**CNSC** – Canadian Nuclear Safety Commission

**CO** – Carbon monoxide

**COR** – Certificate of Recognition

**CRSP** – Canadian Registered Safety Professional

**CSA** – Canadian Standards Association [The organization is now called CSA Group]

**CSSE** – Canadian Society of Safety Engineering

**dB** – Decibels [Unit to measure sound intensity of noise]

**DFM** – Dust, fume, and Mist [This abbreviation refers to a respirator filter cartridge suitable for use against dusts, fumes or mists, and is used in the NIOSH regulation on Respirator Certification.]

**DM** – Dust and Mist [This abbreviation refers to a respirator filter cartridge suitable for use against dusts and mists, and is used in the NIOSH regulation on Respirator Certification.]

**EHS** – Environment, Health and Safety; or Environmental Health and Safety

**ERP** – Emergency Response Plan

**GHS** – Globally Harmonized System of Classification and Labelling of Chemicals

**GC** – Gas Chromatography

**HEPA** – High Efficiency Particulate Air filter [At least 99.97% efficient in the filtration of air borne particles 0.3 microns in diameter or greater]

**HPA** – Hazardous Products Act

**HPD** – Hearing Protective Device

**HPLC** – High Performance Liquid Chromatography

**HPR** – Hazardous Products Regulations

**HSO** – Health & Safety Officer

**HVAC** – Heating, Ventilating and Air Conditioning

**IDLH** – Immediately Dangerous to Life and Health

**ISO** – International Organization for Standardization

**JHA** – Job Hazard Analysis

**JHSC** – Joint Health and Safety Committee

**JOHS** – Joint Occupational Health and Safety Committee

**LC50** – Lethal Concentration. See WHMIS 2015 Train the Trainer definitions above

**LD50** – Lethal Dose. See WHMIS 2015 Train the Trainer definitions above

**LEL** – Lower Explosive Limit

**LEV** – Local Exhaust Ventilation

**LOAEL** – Lowest Observed Adverse–Effect Level

**LPG** – Liquefied Petroleum Gas

**LTD** – Long–term disability

**MSD** – Musculoskeletal Disorders

**MSDS** – Material Safety Data Sheet

**MSI** – Musculoskeletal Injuries

**NCSO** – National Construction Safety Officer

**NFC** – National Fire Code

**NIOSH** – National Institute for Occupational Safety and Health (USA)

**NSC** – National Safety Council (USA)

**OEL** – Occupational Exposure Limit

**OHS** – Occupational Health & Safety

**OHSAH** – Occupational Health & Safety Agency for Healthcare in British Columbia

- OHSMS** – Occupational Health & Safety Management System
- PAPR** – Powered Air-purifying Respirator
- PEL** – Permissible Exposure Limit [The maximum occupational exposure permitted under the OSHA regulations (USA)]
- PPE** – Personal Protective Equipment
- ppm** – Parts Per Million
- PTS** – Permanent Threshold Shift
- QA/QC** – Quality Assurance / Quality Control
- QLFT** – Qualitative Fit Test (for respirators)
- QNFT** – Quantitative Fit Test (for respirators)
- REL** – Recommended Exposure Limit
- RMI** – Repetitive Motion Injury
- ROPS** – Rollover Protection Structures
- RSI** – Repetitive Strain Injury
- RTW** – Return to Work
- SAR** – Supplied Air Respirator
- SCBA** – Self Contained Breathing Apparatus
- SCC** – Standards Council of Canada
- SMS** – Safety Management System
- STEL** – Short-term Exposure Limit
- TDG** – Transportation of Dangerous Goods
- TLV** – Threshold Limit Value
- TSB** – Transportation Safety Board of Canada
- TTS** – Temporary Threshold Shift
- TWA** – Time-weighted Average
- WCB** – Workers Compensation Board (in general)
- WSBC** – WorkSafeBC
- WHMIS** – Workplace Hazardous Materials Information System

If you have any questions or feedback regarding the exam or the exam process,  
please email: [ncso@bccsa.ca](mailto:ncso@bccsa.ca) or call (604) 636-0327.

## APPENDIX

### SAMPLE WEEKLY STUDY PLANNER

Week of \_\_\_\_\_

<b>MONDAY</b>	<b>FRIDAY</b>
Time:	Time:
Place:	Place:
Study Focus:	Study Focus:
<b>TUESDAY</b>	<b>SATURDAY</b>
Time:	Time:
Place:	Place:
Study Focus:	Study Focus:
<b>WEDNESDAY</b>	<b>SUNDAY</b>
Time:	Time:
Place:	Place:
Study Focus:	Study Focus:
<b>THURSDAY</b>	<b>Weekly Study Reminders / Notes:</b>
Time:	
Place:	
Study Focus:	

## How to Use this Weekly Study Planner

This Weekly Study Planner's simple design is meant to encourage its use to organize your study time. By keeping the information on the planner basic you can post it on your fridge or work area at home for quick reference.

The planner asks you to record the week of study at the top of the sheet and leaves room beside each day of the week if you want to include the specific date. Each day of the week asks you to include the time and place you intend to study.

Even if you plan to schedule some time at the kitchen table it is important to write it in. This lets you keep track of what you spent time reviewing and where. It can also help you identify if a particular study time or place went well or poorly and may influence your future study plan / strategy.

The study focus area is where you can document what topics you plan to review and the resource materials you plan to use.

You can use the following abbreviations on your planner to save room and time or make up your own:

<b>LSE</b>	Leadership for Safety Excellence	<b>OFA</b>	Level 1 First Aid
<b>SLA</b>	BC Construction Safety Legislation and Administration	<b>FP</b>	Fall Protection
<b>TST</b>	Train the Safety Trainer	<b>TCP</b>	Standardized Traffic Control Training
<b>PHSM</b>	Principles of Health and Safety Management	<b>ULST</b>	Utility Locating Specialist Training
<b>COR</b>	Safety Auditor Training	<b>CSE</b>	Confined Space Entry/Monitor
<b>WTTT</b>	WHMIS 2015 Train the Trainer	<b>RPFT</b>	Respiratory Protection and Fit Tester
<b>PIM</b>	Principles of Injury Management	<b>TDG</b>	Transportation of Dangerous Goods
<b>SRBC</b>	SiteReadyBC		

## NATIONAL EXAM QUICK REFERENCE SHEET

This sheet identifies which BCCSA course resource has information on the listed topics for easy reference.

As the topics listed are general, this reference sheet is intended to help prepare a study plan and not limit the area of focus

	Leadership for Safety Excellence	Safety Legislation & Administration	Principles of Health & Safety Management	COR® Internal Auditor Training (Audit Document)	Train the Safety Trainer	WHMIS 2015 Train the Trainer	Principles of Injury Management	SiteReadyBC	
<b>HAZARDS / CONTROLS / RISK ASSESSMENTS</b>	X	X	X			X		X	<b>NOTES</b>
<b>TRAINING / ORIENTATIONS</b>	X	X	X	X	X	X	X	X	
<b>INSPECTIONS</b>	X		X	X				X	
<b>INVESTIGATIONS</b>	X	X	X					X	
<b>AUDITS / AUDITING</b>			X	X					
<b>H&amp;S PROGRAM</b>			X			X	X	X	
<b>DOCUMENTATION</b>		X	X	X	X	X	X	X	
<b>EMERGENCY PREPAREDNESS / FIRST AID</b>		X	X			X	X	X	
<b>ADOPTED STANDARDS</b>		X				X	X	X	
<b>WHMIS</b>			X			X		X	
<b>CRIMINAL CODE</b>	X	X					X	X	