Fundamental 55: eLearning Course Package

Want to go beyond the basics of online safety training?

Our certified trainers and OHS lawyers have curated a collection of advanced safety training courses into the Fundamental 55 safety training program – go beyond the **Essential 29** and train for specific hazard controls.

FUNDAMENTAL 55: Asbestos Hazard Awareness

It is crucial to protect your high-risk workforce from this notorious, airborne, health hazard. Asbestos is a natural, fibrous silicate mineral. It is proven that exposure to Asbestos is extremely dangerous; microscopic asbestos fibers, when inhaled, cause certain types of fatal lung disease, which makes asbestos hazard awareness an essential training topic.

Asbestos was used in innumerable construction products before 1980, and many buildings built before that year are considered to have used asbestos materials (any material containing more that 1% asbestos) during construction.

Nowadays, industrial activity including salvage, demolition, and construction, often present Asbestos exposure risks. Even work like brake and clutch repairs or building maintenance and cleaning, can present exposure risks – it comes down to what you're working with and where.

FUNDAMENTAL 55: Behavior-Based Safety

Accidents and injuries have both a human and a business cost, so it is advantageous for employees to practice safe behaviors and mitigate unsafe behaviors in the workplace. This lesson introduces behavior-based safety concepts to employees and creates awareness

around what influences employees to change unsafe behaviors before an accident or injury happens.

FUNDAMENTAL 55: Cannabis Workplace Safety for Employees

FUNDAMENTAL 55: Cannabis Workplace Safety for Employers

Employers may need to revisit workplace policies that address drug and alcohol use, with attention to two competing obligations: on the one hand, employers have a duty to accommodate disabled employees, and medical marijuana is used to treat medical conditions that can constitute a "disability". On the other hand, employers must take every reasonable precaution to ensure the safety of their workplaces and they continue to have the right to prohibit impairment on the job. Assessment of impairment at work may prove to be the most difficult aspect of designing and implementing policies regarding use of marijuana, as testing for drug and alcohol use remains one of the most contentious contemporary issues in workplace law.

FUNDAMENTAL 55: Chemical Safety

Each day you work with industrial chemicals, there is a high-risk work environment. Although chemicals are a broad category, almost always the substances we're talking about are unpredictable, unstable, and dangerous when handled unsafely. Chemicals can be composed of organic or inorganic compounds that are not naturally occurring in the environment, which is why they pose some danger.

The danger of chemicals comes from the many ways in which these substances can inflict trauma for workers: some chemicals contaminate the air and cause respiratory distress, others are highly combustible. A few create nasty problems when they contact the skin or are physically ingested. When handled improperly, chemicals can burn, explode, cause cancer and other illnesses, or

poison and sicken.

Chemicals come in many different forms across different workplaces; they may be dusts, mixtures, paints, fuels, or solvents. Health risks from exposure depend upon the chemical itself, how it is used, and what protections are in place.

FUNDAMENTAL 55: Chlorine Safety

The United States produces more than 13 million tons of chlorine annually, most of which is shipped by rail. The worst chlorine incident in the U.S. happened in 2005 at Graniteville, S.C., where 18 freight train cars derailed and released 120,000 pounds of chlorine gas, killing 9 people, exposing another 1,400, and resulted in 550 hospitals visits. Many of the exposed gained serious lung injuries. As well, 5,000 people were evacuated from the surrounding area.

Chlorine is a dangerous chemical, although. The highly reactive gas is incompatible with many substances.

Today, chlorine is used as an indispensable part of the manufacturing process for the production of pretty much every consumer product.

FUNDAMENTAL 55: Computer Security

Computers do carry threats from a variety of sources, which can jeopardize the work you do and the content you create. The potential threats can be external hackers breaking into information on your computers and online accounts, or they can also involve a colleague accidentally, or intentionally, divulges sensitive information.

Security breaches are not always detectable by IT departments and because of that, it is the responsibility of both employees and the IT department to ensure there is appropriate computer security.

In the case that you disregard company security protocols, or if

you cause a breach of security, there is the potential for legal consequences. Usually, this will depend on the circumstances: the type and extent of data stolen, in addition to the relevant state/provincial and federal laws. Always refer to your company's policies and IT department when in doubt or when you have any questions.

FUNDAMENTAL 55: Discrimination-Free Workplace

Discrimination in the workplace happens when an employee or group of employees is treated less favorably than similarly situated employees of a different race, sex, age, national origin, religion, genetic makeup, etc. Discrimination can both be obvious (such as jokes, slurs, and innuendoes) or subtle (such as job assignments, lack of training opportunities, reduction of hours/pay, demotions and disciplinary actions, and fewer promotions).

Examples of discriminatory practices include and are not limited to a bias in hiring, firing, job assignment, transfer, layoff, recall, fringe benefits, retirement plans, leave, or any other terms or conditions of employment.

Avoiding stopping workplace discrimination can cause harm to everyone, resulting in loss of productivity, poor performance, disruptive work environments, and loss of good employees and managers. Also important, It is against the law and can lead to discrimination charges, costly litigation, and jury awards – negligence in this area of employment is one of the fastest ways to find your business in the courtroom.

FUNDAMENTAL 55: Flammable Liquid Safety

The National Fire Protection Association (NFPA) states around 1,400 fires annually happen because flammable or combustible liquids first were ignited. Aapproximately $76 million dollars of

direct property damage happens each year.

Consider the typical vehicle explosion in movies. Environmental Health & Safety magazine explained that just “1 gallon of vaporized gasoline can explode with the same force as 20 sticks of dynamite.” This is an explanation for why hazards of often volatile flammable liquids, like gasoline, are mostly well known.

There are many uses for flammable and combustible liquids. They often are used in day-to-day operations at industrial and commercial sites as fuels, solvents, and cleaners. Although, flammable liquids are volatile and can start fires.

FUNDAMENTAL 55: Hand and Power Tools

As many as 400,000 emergency room visits each year are caused by power tool injuries.

Power tools do enable us to work much more productively, but hand and power tools also expose workers to flying objects like sparks and metal and wood splinters, electrical shock, and sharp blades and loud noises.

Employees have a primary role in safety as the tool users. You must have clear, established safety protocols for using each piece of equipment and you need to follow those procedures when using tools.

FUNDAMENTAL 55: Hot Work

Hot work is any work that has the potential to produce heat, spark, or flame. Examples include welding, grinding, cutting, soldering, and even drilling. It’s important that those tasked with performing hot work have the ability to identify and control potential hazards prior to carrying out the task.

Our course is designed to provide participants with the ability to recognize the potential hazards and the appropriate controls when performing hot work. We also break down the basic elements of a Hot Work Program.

FUNDAMENTAL 55: Incident Investigation

Over 12 workers die everyday on the job; which adds up to over 4,500 a year.

An accident is defined as an undesired event which results in personal injury or property damage. On the other hand, 'near misses' describe events with no property damage and no personal injury, but where, given a slight change, damage and injury easily could have occurred.

When the safety professional is able to identify, analyze and fix the unsafe conditions behind a near miss, they are able to prevent incidents.

Absolutely nothing should be changed in the scene of an accident or incident, except when necessary to protect the workforce against existing hazards. The incident scene must be maintained as close as possible to its condition during the incident.

In an incident investigation, timing is everything. Over time, the ability to collect evidence and accurately determine what happened decreases. Therefore, investigations must start as soon as it is safe to.

FUNDAMENTAL 55: Industrial Ergonomics

Over time, poor ergonomics can lead to cumulative traumatic musculoskeletal disorders (MSDs) which strain our bodies. Numerous good reasons exist for analyzing the ergonomic health of your workforce; musculoskeletal injuries, once developed, can take people off of the job for life.

The Occupational Safety & Health Administration (OSHA) stated that industries with the highest musculoskeletal disorders rates include health care, transportation, warehousing, retail, and wholesale trade and construction.

Ergonomics refer to making the workplace conducive to the comfort

and productivity of the employee. Implementing ergonomic principles helps everyone avoid on-the-job illness and injury, as well as improving worker job satisfaction through measures that provide a greater comfort, allowing people to perform assigned tasks more naturally.

FUNDAMENTAL 55: Introduction to Radiation Safety

Exposure to radiation in laboratories must be monitored and mitigated with appropriate safety precautions, because there is a risk for radiation poisoning. Although, proper Personal Protective Equipment (PPE) and knowledge of appropriate safety measures, laboratory environments can limit the likelihood of exposure for students and staff.

There are various common sources that you may not be aware of within your work environment. Some examples include x-rays, radioactive isotopes, radioactive materials, reactors, particle accelerators, or even smoke detectors. Many of these sources aren’t as severe as dealing with something like Uranium or Plutonium, but they all do produce or emit radiation. Over time, the effects of low radiation can be a factor in health effects like cancer.

FUNDAMENTAL 55: Job Hazard Analysis

A job hazard analysis (JHA) is a process which helps integrate accepted health and safety principles and practices into a particular task or job operation. Our course is designed to teach people to conduct a JHA.

This helps to identify previously undetected hazards, increase job knowledge of those who participate, improve communication between workers and supervisors, and promote safe work behaviours.

FUNDAMENTAL 55: Laboratory Safety

OSHA stated that “More than 500,000 workers are employed in laboratories in the U.S. The laboratory environment can be a hazardous place to work. Laboratory workers are exposed to numerous potential hazards including chemical, biological, physical and radioactive hazards, as well as musculoskeletal stresses.”

In non-production laboratories, chemicals pose physical health hazards to workers, which is why they are the number one concern for laboratory employees. These employees will likely be exposed to compounds of certain volatile chemicals. Even individually, chemicals can be dangerous or unstable, but when stored beside other unpredictable chemicals or mixed with dangerous compounds, the potential for risk exponentially increases.

FUNDAMENTAL 55: Lead Awareness

The Centers for Disease Control & Prevention state that despite improvements in public health policies and substantial reductions in blood lead levels (BLLs) in adults, lead exposure remains an important health problem worldwide. Around 95% of all elevated blood lead levels reported among adults in the United States are work-related.

Just little lead poisoning causes serious health problems, and at very high levels, it can be fatal.

Lead is a soft, heavy, grayish blue metallic element native to the earth’s crust. The majority of occupational exposure to lead comes from activities like mining, smelting, manufacturing, and through the use and work with manufactured products containing lead.

FUNDAMENTAL 55: NFPA 70E Arc Flash

Electrocution is one of the “fatal four” causes of fatalities in the private construction industry, accounting for 9% of deaths.

For lineman and other utility workers, death by electrocution is a daily hazard that requires attention. In the utility sector, awareness of electrical hazards must be a daily theme for safety and training professionals.

To reduce the risk of injury in the utility industry, trade associations and federal agencies now have many safe work practices and procedures in place to protect employees when working on or near energized electrical equipment and conductors. Current regulations and industry standards are now in place to protect electrical workers from the hazards of shock, electrocution, arc flash, and arc blast.

FUNDAMENTAL 55: Office Ergonomics

OSHA has stated that industries with the highest musculoskeletal disorders (MSDs) rates include health care, transportation, warehousing, retail, and wholesale trade and construction. Annually, musculoskeletal disorder (MSDs) cases cause around 33% of all worker injury and illness.

To compensate for these issues, tracing back millenia, ergonomics was made official in 1857. Ergonomics is defined as the study of physiological interaction between the worker and the work environment. Ergonomics is applied to reduce the risk of musculoskeletal disorders (MSDs) through adapting the work to fit the person instead of forcing the person to adapt to the work. Ergonomics principles being applied to the workplace helps workers avoid on-the-job illness and injury and improves worker satisfaction through measures that provide greater comfort, helping people to perform assigned tasks more naturally.

FUNDAMENTAL 55: PPE Fundamentals

This course provides a practical introduction to the most common types of personal protective equipment (PPE) used to protect against common workplace hazards, such as chemicals, noise and mechanical injury. The basics of PPE are covered, including practical tips for safe use, PPE programs, limitations and legal

responsibilities. This course does not cover specialized PPE – equipment used by emergency responders or to protect against biohazards. It also does not cover fall protection equipment or supplied-air respirators. Additional resources, links and printable lists are provided throughout the course as well as examples and detailed images to better illustrate concepts. The quizzes after each section as well as the exam help measure learning.

FUNDAMENTAL 55: Preventing Workplace Harassment

Do you want to keep your workplace protected against violence and harassment? Our Workplace Harassment & Violence Prevention Online Course will certify that you or your employees are aware of the types of harassment and violence that can occur in the workplace. Participants that complete our workplace violence and harassment training course will have the knowledge, skills and strategies they need to identify potentially dangerous situations, resolve or properly respond to them.

FUNDAMENTAL 55: Safety Audits

OSHA audited over 39,000 organizations in one year, with over 17,000 of those inspections labeled as “programmed”, meaning unexpected safety auditing.

Safety audits embody accountability.

Safety audits assure that effective program elements are in place for identifying, eliminating, or controlling hazards that could adversely impact a company’s physical and human assets. When performed properly, this type of audit helps reduce injury and illness rates, lower workers compensation and other business costs, empower employees by involving them in activities affecting their own safety and health, increase job satisfaction, and make the company more competitive.

Despite OSHA not requiring it, a voluntary safety audit program is

a sound business practice that demonstrates a company's interest in and commitment to continuous improvement of its health and safety effort.

FUNDAMENTAL 55: Safety Awareness

If you're like many safety professionals, you spend your days (and probably nights, too) working on and thinking about ways to make your workplace safer. Unfortunately, this can all come to naught without one thing your workers need to develop: A sense of safety awareness – building safety into the way your workers think about things.

Without it, workers won't wear their PPE, or won't wear it properly. They won't make full use of the safety features built into their equipment; and they won't observe basic rules, such as those of good housekeeping, that can prevent accidents. Without safety awareness, workers might think about production, their compensation, or tonight's softball game but not safety.

FUNDAMENTAL 55: Scaffold Safety

OSHA reports that scaffolding accidents lead to an estimated 9,000 injuries and 79 fatalities every year.

Throughout the industrial world of construction and maintenance, scaffolds are widely used to typically give employees access to heights ranging from a few feet to over several hundred feet.

OSHA describes scaffolds as "any temporary elevated platform and its supporting structure used for supporting employees or materials."

Regardless of how safe or sturdy a scaffold may look, it can only support a specific weight capacity specified by the manufacturer. It is the worker's responsibility to recognize terms associated with capacity limits when working with scaffolds. Each scaffold and scaffolding component is required by OSHA to be capable of supporting, without failure, its own weight and at least four

times the maximum intended load.

FUNDAMENTAL 55: Spill Prevention, Control, and Countermeasure Plan

According to the Environmental Protection Agency (EPA), many of the 14,000 oil spills reported each year are caused by industry activities resulting from storage tanks rupturing, pipeline leaks, and oil transport accidents. These spills present a significant threat to the environment and often require specially trained emergency response personnel to contain and clean up the spills. Some spills are so significant that they may require help from local and state agencies and the federal government.

FUNDAMENTAL 55: Workspace Cleanliness

The goal of this lesson is to provide awareness to the learner about the hazards of a cluttered, unclean workspace and to identify practices to help eliminate clutter.