

# Contractor Safety Orientation – CN

This course is intended for contractors working or entering on  
CN property in the United States

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## Table of Contents

[Safety Is MY Responsibility](#)  
[Authority to Work on CN Property](#)

### Authority to work on CN property

- Right of Entry Agreement
- Notification Prior to Commencing Work
- Required Training

### [Personal Protective Equipment](#)

#### Hardhats

- Eye Protection
- Hearing Protection
- Task-Specific Protection
- High Visibility Apparel (Vests)
- Protective Safety Footwear

### [On-Track Safety](#)

- Working Within 25 feet of any Track
- Job Briefing

### [Equipment](#)

- Operators Trained and Competent
  - Operator's Manual
  - Safety Equipment
  - Parking Equipment
  - Use of Orange Cones to Mark Overhead Power Lines
  - Signals and Communications

### [General Safety Requirements](#)

- Injury Reporting
  - Damage to Railroad Property
  - Use of Drugs and Alcohol
  - Waste Disposal
  - Stopping at All Railroad Crossings
  - Job Briefings
  - FRA Track Safety Standards/CN On-Track Safety Rules

Protecting Excavations, Holes and Trenches  
Working Around Live Tracks  
Leaving Tools and Materials Clear of Tracks  
Complying with all Federal, Provincial and State Laws  
Environmental Safety

#### Task-Specific Requirements

Fall Protection  
Confined Spaces  
Tunnel Safety  
Excavation Work  
Hazardous Chemicals  
Asbestos  
Lead

### **Safety is MY Responsibility!**

The course below is provided for you to review and use as a constant resource. It is important that you work in a safe manner while on the CN property.

#### **Safety Is MY Responsibility**

The safety of personnel, property, rail operations, and the public is of paramount importance in the performance of any work on CN. As reinforcement and in furtherance of overall safety measures to be observed by the contractor (and not by way of limitation), the following special safety rules shall be followed. The terms “contractor” and “employees” as used in this document refer to all employees of the contractor as well as all employees of any subcontractor.

CN is committed to providing the safest workplace possible for our employees, our contractor’s employees, and the public. Adherence to these minimum safety requirements, plus additional instructions at the job site, will help to ensure an accident / injury- free project. The railroad’s employee in charge (EIC) is authorized to take any actions necessary to prevent injuries to any person, damage to railroad property, or disruption of railroad operations.

**“ NO job is so important, no service so urgent that we cannot take the time to perform all work safely”**

**L.I.F.E. Safety Rule Book**

#### **Authority to Work on CN**

Before working on CN property, the contractor must:

- Read, sign and deliver to the EIC a right-of-entry Form for Contractors. (Link right-of-entry form)
- Notify the railroad representative at least 48 hours prior to commencing work on CN property. Additional notification will be made at least 24 hours prior to any person or equipment coming closer than (including boom extensions) 25 feet to the track.
- Ensure that all employees have received the required training for the work to be performed.

### **Personal Protective Equipment**

The contractor shall require its employees to wear personal protective equipment and appropriate clothing as specified by CN rules, regulations, or the railroad's employee in charge. In particular, the protective equipment to be worn shall be:

- Shirts shall cover torso and have at least ¼ length sleeves, loose or torn sleeves shall be tied or secured in some manner.
- Pants or trousers must be ankle length (no shorts). Flared, loose or torn cuffs shall be tied or secured to prevent catching in machinery or on equipment.

### **Protective Eyewear:**

- All employees and people granted access to CN property must wear eye protection meets the American National Standards Institute (ANSI) Z87.1-latest revision.

### **Protective Hardhats:**

- All employees and people granted access to CN property must wear protective hard hats that meets the American National Standards Institute (ANSI) Z89.1-latest revision.

### **Protective Footwear:**

- All employees and people granted access to CN property must wear protective footwear that meets the American National Standards Institute, US - ANSI Z41. Approved protective footwear shall be laced to cover and support the ankle with a defined heel height of ½ inch to a maximum of 1 inch, and a hard sole. and boots need to be equipped with laces, which must be laced to the top and tied.

### **High Visibility Apparel:**

All employees and people granted access to CN property must wear approved high visibility apparel. In the U.S. high visibility apparel must meet ANSI/ISEA standard 107-1999 conspicuity Class 2.

### **Hearing Protection:**

Where it is not possible to eliminate noise hazards through the use of engineering or administrative controls, hearing protection that meets the standards set out in ANSI S3.19/S12.6 or CSA Standard Z94.2-M1984 is to be used by every person granted access to the workplace.

Hearing protection must be worn within: 100 feet of running machinery and 500 feet of an operating snow jet.

Other types of personal protective equipment, such as respirators, fall protection equipment and face shields, must be worn as directed by the railroad's EIC.

### **Recommended Practice**

**Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.**

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### **On-Track Safety**

The contractor is responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection regulations (49CFR214, Subpart C) and CN Railroad's On-Track Safety rules. (Link to both FRA Roadway Worker and CN's On-Track Safety rules) Under 49CFR214, Subpart C, railroad contractors are responsible for the training of their employees on these regulations.

In addition to the instructions contained in Roadway Worker Protection regulations, all contractor employees must:

- Maintain a distance of at least 25 feet to any track unless the railroad's EIC is present to authorize movements. The railroad's EIC will determine and provide the type of On-Track Safety that is required for the work being performed.

- Wearing of PPE is mandatory at **ALL** times when working on CN property. Participate in a job briefing during which the railroad's EIC will specify the type of On-Track Safety for the type of work being performed. Contractors must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. They will also receive special instructions relating to the work zones around machines and minimum distances between machines while working and traveling.

## Equipment

It is the responsibility of the contractor to ensure that all equipment is in a safe condition to operate. If, in the opinion of the railroad's EIC, any of the contractor's equipment is unsafe for use, the contractor shall remove such equipment from the railroad's property. In addition, the contractor must ensure that:

- The operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:
- Familiar and comply with CN's safety rules on lockout/tagout of equipment.
  - Safety Rule Book (L.I.F.E.).**
    - LIFE Inside Covers Job Briefing Guidelines
    - LIFE US Clerical 2nd Edition
    - LIFE US Engineering 2nd Edition
    - LIFE US Mechanical 2nd Edition
    - LIFE US Transportation 2nd Edition
- Trained in and comply with the applicable operating rules if operating any hi-rail equipment on-track.
- Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other rail-bound equipment.
- The operator's manual, which includes instructions for safe operation, is kept with each machine.
- All self-propelled equipment is equipped with a first aid kit, fire extinguisher, and audible back- up warning device.
- Unless otherwise authorized by the railroad's EIC, all unattended equipment which is parked a minimum of 8 meters or 25 feet from any track and a minimum of 500 feet from any road crossing.

Before leaving any equipment unattended, the operator must:

- Stop the engine and properly secure the equipment against movement.
- Verify that the master battery switch is left in the off or disconnect position and padlocked.
- Where equipment has an enclosed cab, padlock the cab access doors.
- Cranes are equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead power lines. All overhead lines are considered to be high voltage.

- All moves are well communicated and coordinated with other employees at the job site. Emergency signals to stop movements may be given by anyone.
- All vehicles, trucks, backhoes are to give the right of way to trains and must be prepared and able to stop at all railroad at-grade crossings and shall stop when necessary.

All vehicles and equipment must come to a complete stop if operating within 8 meters or 25 feet of the nearest rail upon the approach of a train and be no closer than 5 meters or 15 feet of the nearest rail when train passes.

Seat belt use is required when operating machines so equipped and when driving or riding in vehicles. This requirement is optional when on the rail but their use is recommended

### **General Safety Requirements**

The contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and properly trained in all safety and health aspects of the job. Specifically, the contractor must ensure that:

- The railroad is promptly notified of any reportable injury (as defined by the U. S. Occupational Safety and Health Administration - OSHA) to an employee that occurs during the performance of work at the job site. The railroad must also be promptly notified within a 24 hour period of any and all inspections conducted at the work site by any federal, state, provincial or local government agency.
- The railroad is promptly notified of any damage to railroad property.
- Employees do not use, be under the influence of, or have in their possession any alcoholic beverage or illegally obtained drug, narcotic, or other substance while on railroad property. Smoking is not permitted in any CN interior workplace or motor vehicle.
- All waste is properly disposed of in accordance with applicable federal, provincial, state or local regulations. No open fires are permitted on railroad property.
- **All employees participate in and comply with any job briefings conducted by the railroad's EIC. During these briefings, the railroad's EIC will specify safe work procedures (including On-Track Safety), the potential hazards of the job, and Emergency Response Procedures. If any participant has any questions or concerns about the work, he/she must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.**

- All track work performed by the contractor meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.
- All excavations, holes, and trenches are protected to prevent injuries to other workers, railroad employees, or the public.
- All employees comply with the following safety procedures when working around any railroad track:
  - Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
  - Do not step or walk on the top of the rail, frog, switches, guardrails, or other track components.
- In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 25 (8 M) feet between yourself and the end of the equipment. Do not go between pieces of equipment if the opening is less than one car length 50 feet (16 M).
  - Do not walk or stand on a track unless authorized by the railroad's EIC.
  - Before stepping over or crossing tracks, look in both directions.
  - Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when equipment has been protected against movement and authorized by the railroad's EIC.
- **No tools or materials are left close to the track when trains are passing.**

All employees comply with all federal, state, and provincial regulations concerning workplace safety.

All employees protect the environment by:

- Conducting a daily clean-up of the work area
- Properly disposing of any waste, including hazardous waste
- Not dumping, burying or burning waste material on CN property
- Labeling all containers as to contents and hazards
- Providing a means to capture any fluids leaking from equipment
- Providing adequate dust control
- Containing any runoff from washing work equipment

**The contractor must review the fall protection plan with the railroad's employee in charge (EIC) before commencing work.**

### **Task-Specific Requirements**

## Fall Protection

The contractor must ensure that its employees comply with fall protection requirements contained in:

- FRA's Bridge Worker Safety regulations 49 CFR 214, Subpart B when working on railroad bridges in CN's US properties.
- OSHA's Fall Protection regulations when working on all other elevated structures when working in CN's US properties.

## Confined Spaces

The contractor must ensure that its employees working on CN properties comply with OSHA's Confined Space regulations 29 CFR 1910.146. If it will be necessary to enter or work in a confined space (permit-required or non-permit required), the contractor must review the confined space entry plan with the railroad's employee (EIC) in charge.

Examples of confined spaces on CN are:

- Sanitary and storm sewer systems
- Sand towers
- Underground utility vaults
- Boilers
- Pipe/utility tunnels
- Enclosed railroad cars (covered hoppers, tank cars, etc.) Pits

The contractor will comply with their own permit space program or CN's confined space entry program. In addition, the contractor must:

Obtain any available information regarding permit-required confined space hazards and entry operations from CN's Employee In Charge (EIC).

**Coordinate entry operations with the CN, when both CN employees and contractor personnel will be working in or near the permit-required confined spaces, so employees of both CN and the contractor do not endanger each other.**

## Tunnel Safety

Prior to working in any railroad tunnel on CN property, the contractor must review the specific tunnel safety plan with the railroad's employee in charge. The contractor should anticipate that their employees will be required to wear respirators while working in the tunnel. Therefore, the contractor's employees should be medically cleared and fit-tested for the appropriate respirators prior to commencing work.

**The contractor's employees must participate in all job briefings pertaining to their work in the tunnel and comply with instructions given in the job briefings.**

### **Excavation Work**

The contractor must ensure that all employees comply with OSHA's Excavations regulations 29 CFR 1926, Subpart P, when working on CN property. If it is necessary to work in or around an excavation, the contractor must review the excavation safety plan with the railroad's employee in charge prior to commencing work.

### **Hazardous Chemicals**

The contractor must ensure compliance with OSHA's Hazard Communication regulations 29 CFR 1910.1200. when working on CN property. These regulations require employers to establish hazard communication programs to transmit information on the hazards of chemicals to their employees by means of labels on containers, material safety data sheets, and training programs. Implementation of these hazard communication programs will ensure all employees have the "right-to-know" the hazards and identities of the chemicals they work with, and will reduce the incidence of chemically - related occupational illnesses and injuries.

In the U.S., a copy of CN's Hazard Communication Written Plan will be available for review by contractors working on or near Railroad property where hazardous chemicals are used or stored. By reviewing this Written Plan, contractors will learn the identity of any potentially hazardous chemicals to which their employees may be exposed while working at a CN facility and precautions necessary to protect employees from these hazards. Contractors will also be able to request a Material Safety Data Sheet (MSDS) from the facility supervisor/manager.

Contractors shall provide CN with copies of MSDS for any hazardous chemicals that will be used prior to bringing them into a CN facility or using them on CN property.

**In the event of a spill involving hazardous chemicals the contractor must immediately call CN Police at 1-800-465-9239.**

### **Asbestos**

The contractor must ensure that all employees comply with OSHA's Asbestos regulations 29 CFR 1926.1101 when working with any materials known to contain asbestos. The contractor must review with the railroad's employee in charge their plan to protect all personnel from the hazards of airborne asbestos.

## **Lead**

The contractor must ensure that all employees who are exposed to lead comply with OSHA's Lead regulations 29 CFR 1926.62. Each contractor must have a program that protects its employees and others who are in or near the work site from the hazards of airborne lead. Work processes covered in this program include but are not limited to routine and emergency maintenance of bridges, buildings, overhead cranes, sand towers, tanks, scales and other steel structures with lead-based coatings.

The contractor must review with the railroad's employee in charge their plan for protecting all personnel from exposure to lead before commencing work.

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The information contained in this course addresses the Federal Department of Transportation hazardous materials security awareness training requirements found in 49 CFR & 172.704 (a) (4), mandated by Docket HM-232, which was effective March 25, 2003. ([copy of regulations link for instructors information.](#))

Completion of this program as outlined in this website will satisfy the security awareness training requirement for all employees (including supervisors). Proper record keeping is an important requirement for compliance, this will be taken care of on this site and will be available for you and the Railroads to review to assure compliance as well as the Contractor ID badge. Therefore, please ensure that all employees' training is documented so that it can be properly entered into the training database.

Rail security awareness training for new hires, must be completed within 90 days after employment.

### **Trainer's website course guide:**

- Have each students complete this class (these website records will be retained for a period of at least three years).
- Submit the fully completed roster to the Risk Management Department so that the employees' training records can be updated.

## **RAIL SECURITY AWARENESS COURSE**

In 1993 a group of religious fundamentalist's attempts to topple the World Trade Center, by detonating a rented truck filled with ammonium nitrite, urea and nitric acid.

In 1995 Timothy McVeigh blows up the federal building in Oklahoma City as a result of his growing anger with the federal government.

In 1999 two members of an anti-government militia are arrested for plotting to detonate 24 million gallons of liquid propane at a storage facility in Elk Grove, California.

On September 11, 2001 a small group of well organized terrorists hijack four commercial aircraft crashing two into the World Trade Center, one into the Pentagon, while the passengers of the fourth cause its crash in a Pennsylvania field preventing its apparent attack on another target. Thousands of innocent people are killed.

These are a few examples of terrorist attacks that have drawn attention to the importance of security of hazardous materials in America's transportation system.

While none of these incidents involved the transportation of hazardous materials, they illustrate how hazardous materials have the potential to be transformed into terrorist weapons.

Hazardous materials are essential to the economy of the United States and the well being of its people. They fuel our cars and trucks and locomotives, heat and cool our homes and offices, and purify the water we drink. Hazardous materials are used in farming, medical applications, in manufacturing, mining and other industrial processes. Over 800,000 shipments of Hazardous Materials are made daily.

Hazardous materials move safely by plane, train, truck, vessel, or pipeline in quantities ranging from ounces to thousands of gallons. In the wrong hands however, hazardous materials can pose a significant threat. Addressing this threat is vital to protecting our citizens and our economy.

The Department of Homeland Security and law enforcement agencies alone cannot guarantee the security of the transportation system. They need the help of carriers, shippers and producers.

I have the privilege and honor to be President of the Association of American Railroads. In this time of heightened security alert, our nation is depending on a safe, secure and reliable transportation system; and, as you know, freight railroads are the backbone of that transportation system. The secure operation of railroads is critical to our economy, our national defense, and our way of life.

In the rail industry, safety and security have always been our highest priorities. Thanks to the efforts of our companies and your personal dedication to safety, we are prepared.

However, we must continue to focus and heighten our awareness. We can become even better at what we do. The Association of American Railroads and your individual companies have developed plans in a continuing effort to enhance the security of the rail

system, especially in the area of hazardous materials.

As you watch this presentation, I invite you to join your fellow employees in taking your skills and safety principles to a new level. This will help us “all do our share: in the years to come.

We can all be proud to be part of the railroad family. Thank you for everything you do to provide safe, secure, and efficient transportation.

**Mr. Ed Hamburger, President & CEO of AAR**

### **What you need to do while on Railroad Property.**

A heightened awareness.

An alertness to your work environment.

A commitment to safe and proper procedures and rules.

The willingness to follow up on out of the ordinary circumstances and situations.

And the knowledge of how to communicate and make proper notification of exceptional or unusual circumstances.

Each is a part of what we can do and they are all a part of being a railroader.

The U.S. Department of Transportation now requires each employee involved in the transportation of hazardous materials to receive training in transportation security awareness.

Whether you work in the railyards, out along the railroad track, or in a shop or an office, security awareness means contributing to a safe work environment by being aware of your surroundings at all times, complying with rules, instructions and conducting thorough job briefings.

In other words staying alert for events or circumstances that are out of the ordinary and knowing what to do, while at all times maintaining your safety and the safety of others.

For example trespassers: We've all seen them on the railroad. However, in these times it is especially important that we don't unauthorized persons on our property. If appropriate politely question the person and inform him or her of the laws regarding trespassing and the potential dangers on railway property for yourself that they leave the property.

Sometimes there is the more questionable type trespasser, such as the person who just looks out of place. We know how railroaders dress and usually we are fairly familiar with vendors and delivery people in our areas. In this case notify the appropriate authorities, supervisors, railway or local police, according to your railroad's procedures. Graphic - Police Emergency Response Number.

In any case, do not take risks. But, on the other hand do not ignore the unauthorized person on railroad property or on our trains. Another type person to be aware of is the person who seems curious about the railroad or its operations. Especially people who ask about times and routes of trains, movements involving hazmat, military supplies and people who wish to know locations of offices such as dispatching centers.

Also notice people who appear to be lost or confused. They may actually be lost, or they may be trying to find their way around your office building or work area.

If you have a new employee working with you, take the time to brief him or her on what is "normal" or accepted in your work area, what they may expect and whom they may expect to see.

Try to heighten their awareness and give them examples of people or activities that they should be alert for. Prepare them! Teach them to recognize the "norm: and maybe they will then recognize the out-of-the ordinary.

We should also heighten our awareness for unusual circumstances. Things we might have taken for granted in the past should "get your attention".. For example, a vehicle parked on the right of way or near your shop, or an unfamiliar truck or van making a delivery. Now, that's not to say that every unfamiliar vehicle is "suspicious". However, it is important that we pay attention to our environment and circumstances that are out of the ordinary.

The security of railroad property is also a high priority.

Particular attention should be paid to: bridges; tunnels; fuel storage facilities; yards with high volumes of haz mat shipments; dispatching centers; communication & signal systems and computer centers.

Rules compliance, equipment and job knowledge and knowledge of your territory or work area play key roles in transportation security.

For example, while out on the railroad, make doubly sure that locomotives and trains are secured. When possible lock the locomotive. Secure remote control belt packs, when equipment is left unattended at outlying points or at remote points within yards or terminals. Follow the rules. As always the rules are your best friends when it comes to preventing incidents and injuries.

Double check switches. Determine if they are lined and locked properly. Pay close

attention to derails. Lock all company vehicles when not in use. Check buildings and shanties for security, lock-'em up!

Pay special attention to areas or buildings that may be used to store hazardous materials. If an area, building, or office is restricted or secured, that's just what it should be, restricted to entry. Do not allow unauthorized persons to enter and if unauthorized persons do seek entry, refer them to the proper authority.

If you work with a computer take all security precautions. Lock it down when it is unattended. Never share your user ID and password, and don't allow others to use your computer while logged on. There is a lot of information that can be gained through our company computer network, such as train documents and car movement records.

Protect your company equipment. Lock up all materials.

Car inspections are a vital part of our rail security. Increase your scrutiny of railcars especially hazardous materials and military shipments. Look for unusual items mounted on or under cars. Report unusual conditions to the appropriate authority. Look for signs of tampering.

Each of us is familiar with the routines and people we see every day in our office, yard or shop. If you see an unfamiliar face or questionable situation, ask questions if it seems safe to do so. Check credentials from those who say they work for a government agency. Peacefully confront strangers or visitors on property. Determine if they have a business need to be there, such as a contractor. If there is any question in these cases notify your supervisor or appropriate authority.

Watch and listen. Be aware of personal conversations with others on or off the property about your job and yard. Unusual interest in technical details should heighten your suspicion and should be reported. Do not speak openly, about detailed information on trains, direction of movement, schedules and consists, especially hazardous materials, business car and military movements. This includes posting information to internet sites.

As always, in any effort teamwork and communication is imperative. Be familiar with and follow instructions on the emergency response procedures.

Keep one another focused; discuss alertness and security at job briefings and safety meeting; remind one another of things to look out for; share information; discuss precautions and proper responses to situations; follow the plan; and make a contribution. Each of us has a responsibility. It's bigger than just our work group or railroad.

Now, we know we have covered a lot of ground in a short time and of course we can't include every situation or response in a program of this length. That's where you come in. Remember, if you do notice people or events out-of-the ordinary, don't over-react. Don't under-react either. Take appropriate action, and that means being prepared.

Know the appropriate action or notification. Take the time to prepare yourself with knowledge. And most of all DO NOT take risks, with your safety or the safety of others.

As we said earlier all citizens, all railroaders have a responsibility to the safety and security of our families, homes, communities and our nation. There are not better reasons to heighten our alertness and awareness. It is up to all of us “to do our share”. We are the eyes and ears of safety and security for the railroad. We are each on the front line of defense. We are all in it together.

Rail security awareness, do what you’ve always done, only better.

Make sure while on Railroad property that you know the Railroad emergency number.

**SAFETY IS MY RESPONSIBILITY.**