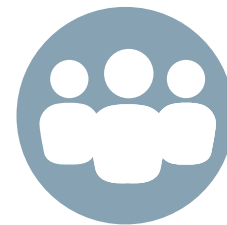




# Customer Safety Handbook

March 2017



[www.cn.ca/safety](http://www.cn.ca/safety)

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# Our Safety Strategy

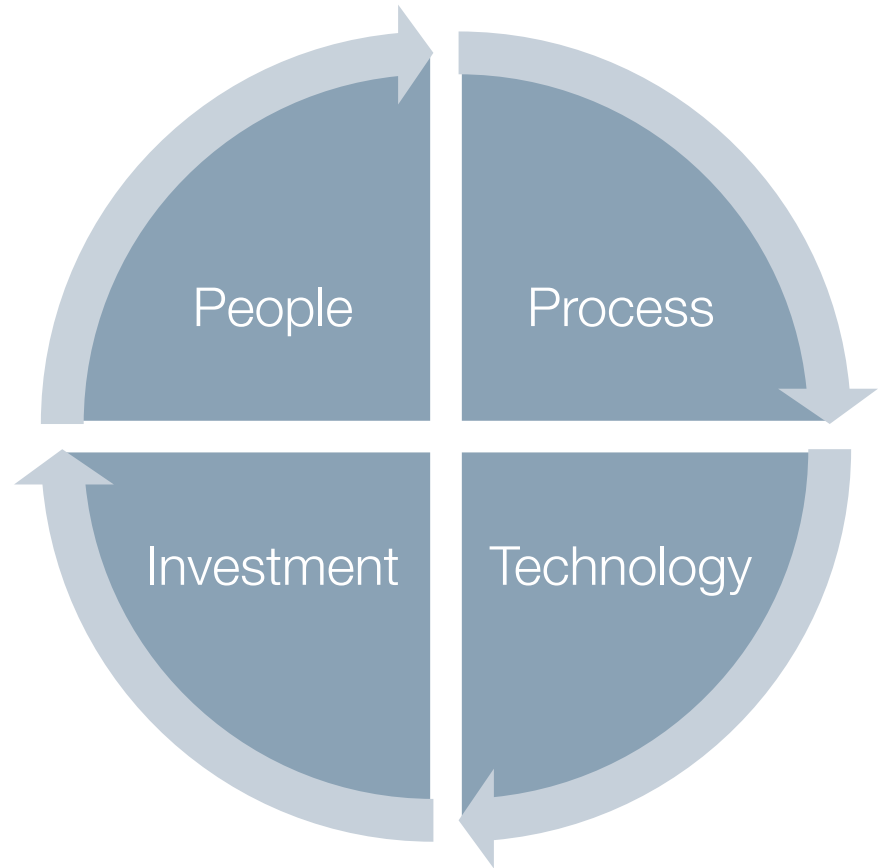
**Safety is of the utmost importance at CN.** We all have an important role to play – we need to look out for each other. This means keeping our railroad, our employees, our communities, our customers and their goods safe.

Through our Safety Management System (SMS) program, we focus on People, Process, Technology and Investment to reduce risk, injuries and accidents.

We promote our culture of safety knowledge and practices with safety summits, peer-to-peer communication, onboarding and intensive training programs for new and existing employees. We have two new facilities; in Winnipeg and Homewood, specifically for training our new generation of safety-minded railroaders. Our training doesn't stop there. We have a structured on-the-job training program in which a trainee's progress is captured, ensuring trainers identify employees for special recognition or focused coaching.

Railroading is a demanding job, it requires constant focus and attention to detail. We rely on our railroaders to teach one another in being safety leaders to ensure we all get home safely at the end of the day.

The rules and guidelines in this handbook are only as good as our commitment to following them. **We must all be engaged and responsible for practicing safety and protecting one another.**



# Working With Rail Equipment



## Moving Cars the Right Way

- 1 Knowing the Rules Helps Keep Everyone Safe**  
The Rail Operating Rules and internal CN operating instructions apply to railway operations.
- 2 Make Sure Everyone is Trained and Certified to Move Railcars**  
You must be qualified in CN Rules to operate on CN tracks. If you move railcars on property owned by CN, you must be trained to do so by CN, or a third-party trainer who has been certified by CN.  
  
If you or your employees have not received proper certification, you are not permitted to move railcars by any means including winches, front-end loaders, forklifts, trackmobiles, locomotives, pry bars, gravity, etc. The movement of railcars by untrained personnel can result in serious injury, derailment, or damage to the railcar, so please seek proper training and stay safe.
- 3 Safe Work Procedures Protect Us All**  
The movement of railcars by mechanical methods (i.e. loaders, cables, winches, pulleys, etc.) requires the development of safe work procedures specific to each operation. It is important that you document and train your employees in safe car movement.

When developing your operating standards, here are some key points that you should integrate into your own procedures:

- No car can be moved while people are working in or around that piece of equipment.
- Continuous awareness and inspection — like walking around the car and verifying for the removal of all dock plates, loading/unloading equipment, connecting hoses or cables or obstructions of any kind.
- Clearly indicate the method of controlling and signaling that will be used during car movement activities.
- Before coupling to any car, ensure it is properly secured and observe the couplers to ensure they line up and that one knuckle is open.
- Ensure one anglecock is left open after moving cars with coupled air lines.
- Do not adjust drawbars, knuckles, hoses or angle cocks when the cars are about to couple.
- Before moving a string of cars, confirm that they are all coupled together and make sure all handbrakes have been removed.
- Someone must always be in a position to observe the leading end of the movement and relay signals to the equipment operator.
- Railcars must never be moved foul of CN main track, sidings or other tracks.
- Cars must not be moved with the brakes fully applied or when the wheels are skidding.
- Ensure the brakeshoes are tight against the wheels and push or pull to test brakes.
- Handbrakes must not be released until it is clearly identified how the movement will be controlled and stopped.
- Do not lift railcars in any way.
- Do not push or pull on the car by the handrail, ladder or any other part of the car not designed for that purpose.
- Notify CN immediately in the event of any derailment.
- Always leave cars with sufficient handbrakes applied.
- Equipment (such as front end loaders, etc.) must not be operated within 30 feet (10 metres) of the nearest rail of any CN main track or siding without the presence of a CN flag person.

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## Think safety every time

More detailed information regarding the safety of your operations can be obtained from Transport Canada, the Federal Railroad Administration, or the regulatory body that governs your industry.

# Opening & Closing Railcar Doors

The doors of railcars may not always be the most straightforward to operate. That's why it's important to be aware of the key safety issues related to railcar doors:

- Gear mechanism on plug doors can cause the handle to spin resulting in employee injury.
- Plug doors must be securely closed whenever the car is being moved.
- A shifted load against a door may cause the door to jump outward when released.
- Lading may fall out when opening any doors.
- Check that door hinges are secure in track, top and bottom, before opening.

All doors should be closed and secured prior to releasing cars, including bottom doors and top hatch covers. Cars that have open plug doors cannot be moved by train crews. Also be aware of OSHA 29 CFR 1910.178, which states:

*A safe distance should be maintained from the edge of ramps or platforms while on any elevated dock, platform or freight car. Powered industrial trucks equipped with a specific device to open and close railroad freight car doors can be used.*

## **Keeping Equipment Clear of Other Tracks**

Whenever moving railcars please ensure they are not left "foul" of another track or route where it will be a hazard to other movements on adjacent tracks. Fouling is leaving equipment on a track too close to a switch or within the turnout such that a movement on an adjacent track does not have sufficient clearance to pass safely, including any personnel riding the side ladder of a car.

**Track centres measuring less than 13 feet (4 metres) in any location should immediately be reported to CN for furtherance to the attention of CN's Regional Chief Engineer.**

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## Working the safe way

**Contact CN's Service Delivery Centre at 1-866-926-7245**

for specific instructions any time you receive a car type you are unfamiliar with.

# Protective Measures

To ensure everyone's safety, railcar loading and unloading operations may require that specific protective measures are put in place so equipment is not moved while employees are working on or near it.

Any time people are working on or about railcars on CN property, they require "positive" protection from CN yard or train movements. This can be done by various means such as securing a non-main track switch with a private lock, or by installing a private lock on a derail set in the derailing position. The exact method for each location will be determined after a consultation with your local CN Transportation Supervisor.

## Dangerous Goods Shippers

If you handle regulated dangerous goods then special provisions apply. Be sure to comply with the TDG Act and ensure that tracks where dangerous goods are being loaded or unloaded are protected by locked switches or locked derails that are controlled by the person conducting the operation.

## Working with "Blue Flags"

Within the railroad industry blue flags are used by railcar maintenance personnel to indicate when they are working on or near rail equipment. When in use, the track is locked at both ends to prevent equipment from gaining access to that track.

**How does CN use them?** At CN, the use of blue flags is restricted to Mechanical and Intermodal personnel who are the only ones authorized to put up or remove such flags. In order to uphold this protective measure for CN personnel, you are not permitted to put up or remove blue flags on CN property. In special situations such as "Team Tracks," a specific protection procedure must be developed with CN divisional personnel.

**How can you use them?** You can choose to use blue flags on your own property, but be sure to have clear written procedures pertaining to their use. To ensure employee safety, CN will not perform work under your blue flag until it is confirmed that proper procedures are in place.

## When using blue flags, we suggest the following:

- Keep flags clean on both sides with the paint in good condition, so they are clearly visible.
- Secure and lock so that it will not be knocked over or inadvertently removed.
- Do not display them between adjacent railcars which can block them from view of employees.
- Display blue flags at one or both ends of all equipment on the same track.
- Develop safety procedures for flag protection and removal.

High-visibility blue lights should be used along with flags during evenings or in bad weather.

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## Looking out for each other

At CN we're always thinking about safety.

Talk to your account manager to find out how you can get trained to operate on CN tracks.



# Car Securement – All About Brakes

**Air brakes** are designed for train control and operate through air pressure when cars are hooked to the locomotive. They are not intended for long-term car securement as air brakes will release over time.

**Handbrakes** secure railcars in place when not coupled to a train and avoid unintentional movement.

**How do they work?** Handbrakes apply force against the wheels by taking up slack on a chain which is linked by a series of rods, levers and gears to brake shoes. Once a handbrake is properly applied, it takes considerable force to move that piece of equipment.

**How many brakes are required?** The **minimum** number of handbrakes required is one, with one additional handbrake for every 10 cars, to a maximum of 5 in total when grade is less than 0.4%.

- 1 car = 1 handbrake
- 2 cars = 1 handbrake
- 10 cars = 2 handbrakes

In many instances, due to grade and other factors, more brakes may need to be applied. It's exceptionally important to be familiar with these minimum brake requirements. For additional information, please contact your local transportation supervisor.

## **How do you operate a handbrake?**

Always use the correct hand position:

- Use one hand to operate the brake and the other to firmly grip the equipment.
- When applying, maintain a firm grip on the grab iron with the left.
- When releasing wheel-type handbrakes, keep hands and fingers clear of the wheel.

Always keep the correct body position:

- Do not apply or release handbrakes located on the end of railcars from a position on the ground.
- Be alert while climbing on a car, operating the handbrake and climbing down the car.
- Be aware of other equipment in the area.
- Avoid applying handbrakes on the leading platform of a moving car.
- Maintain 3-point contact when applying or releasing a handbrake, except with standing equipment with a low side-mounted brake, which may be operated from the ground.
- Never operate a handbrake while standing on a drawbar head, other coupling mechanism or rail.
- Be on guard against sudden impacts. Anticipate starts and stops.
- Observe lading for tonnage and type of load.
- Be cautious of a surge or shift of load (e.g. tank cars will surge due to lading shifting inside).

## **What do you need to consider before releasing the handbrake?**

- Is there anyone working on or around the equipment?
- Is the equipment on a slope? Will it start to roll if the handbrake is removed?
- Are any dock plates, loading chutes, hoses or other attachments connected to the cars?
- Are any hoses, cables or extension cords, or any other obstructions lying across the rails?
- Can the cars be safely moved, stopped and handbrakes reapplied?
- Are the operators familiar with safe methods of car movement?
- Are there derails in the vicinity?



***What happens if you forget to take off the handbrake?*** Moving a railcar while the handbrake is fully applied is very destructive. They apply sufficient force against the railcar's wheels so that they do not turn when the car is pushed or pulled, resulting in excessive heating and the wheels skidding along the track. Skidding a wheel as little as 15 cm (6 in) can cause small cracks on the tread of the wheel, which leads to shelling and cracking deep within the wheel. This structural damage can go undetected until the wheel, under the weight and stress of train operations, suddenly breaks apart. Railcars should not be moved with the handbrakes applied, even if they are only partially applied.

## Derails – The Do's and Don'ts

A derail is designed to force the wheels of a railcar off the track. As damaging as this is to the wheels and track, derails are installed to protect people and operations from unattended railcar movements.

- DO** Rely on railroad personnel for applying and removing derails — it is their responsibility.
- DO** Have clearly written procedures to support the possible specific cases where derails are to be operated by non-railroad personnel.
- DO** Be familiar with the location of derails on the tracks you use.
- DON'T** Leave unattended derails unlocked and in the non-derailing position, whether there are cars on the track or not.
- DON'T** Employ private locks to CN derails.



# Railroad Infrastructure & Equipment Design

# Customer Loading Practices

play a critical role in everyone's safety. The way in which a railcar or container is loaded makes all the difference when it comes to railroad safety. Help keep us all safe by ensuring all of the rules and regulations are followed.

**Loading Rules & Guidelines** are established by the Railway Association of Canada (RAC) and the Association of American Railroads (AAR).

- Specific instructions and requirements for intermodal, closed and open top loading rules are contained in their circulars, figures, commodity pamphlets, best practices and general information series publications.
- Follow the loading rules for the type of lading and railcars being used. This applies to all railcars including intermodal containers and trailers, boxcars and covered hoppers.
- Mandatory requirements for proper load distribution can be found in, but are not limited to AAR Circular #42-K and in the General Information Bulletin #5, both of which can be found on the AAR website at [www.aar.org](http://www.aar.org)
- The circulars, figures, commodity pamphlets, best practices and general information series publications are reviewed and updated regularly; please ensure you have the most current ones when referencing them.
- Other information and standards may be found through other organizations but not limited to; such as the Canadian General Standards Board (CGSB) and the MOT and DOT.

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## Let us help

Need help with carload open top loading? Find the specialist nearest you at [www.cn.ca/damageprevention](http://www.cn.ca/damageprevention)

# Carload Service

**Before loading**, please check that the railcar is in good mechanical condition.

- Weathertight/leakproof.
- Interior floor in good condition (no holes) interior walls in good condition.
- Doors and locking mechanisms in good condition, closed properly and sealed.
- Safety appliances such as ladders, steps, railings are not broken.
- No signs of any other conditions that do not appear normal.

**Load Balance & Securement** affects the car's performance in train service. An even balance of weight is a key factor in preventing train derailments. Ensure that loads are evenly distributed throughout the car, regardless of the product being loaded. Securing your load is equally important as it can shift and put the car off balance during transport if done incorrectly.

**Closed Car Loading** must be in conformance with Published AAR Closed Car Regulations. If they do not appear to apply, please contact the CN Damage Prevention team to assist you in developing applicable Safe Loading Standards for your shipment.

**Open Top Loading** must be in conformance with the published AAR Figure or RAC circulars. Cars moving in the United States and interchanged off of a Canadian railroad must be loaded to an AAR Figure. If they do not appear to apply, our Open Top Specialist can assist you with the development of applicable Safe Loading Standards for your shipment.

**Prior to releasing a car**, it's important to ensure that the load is properly blocked and secured for all types of lading and railcars being used. All loose materials should be removed, and any banding, chains or cables are removed or secured.

## Intermodal

**Before loading**, verify that the container is in good condition and in compliance with the most current AAR Mechanical Division specifications (AAR-600, M930, and M931). CN has set additional rules and regulations to complement the AAR guidelines, they can be found in tariff 6800. Be sure to consult Ministry of Transportation (MOT)/Department of Transportation (DOT) road and highway regulations for the trucking portions of your shipments.

**Load Balance & Securement** is important to railway safety as an even balance of weight is a key factor in preventing train derailments. Securing your load is equally important as it can shift and put the car off balance during transport if done incorrectly.

**Prior to releasing a loaded container**, it's important to ensure that the contents have been loaded in compliance with CN's tariff CN-6800 and the AAR Intermodal Loading Guide issued in 2011, and revisions thereto. If specific loading requirements appear not to be covered in the AAR Intermodal Loading Guide, CN's Damage Prevention Department is available to provide acceptable loading and securement procedures.

**Check out our website for loading tips and contact details for the Damage Prevention Officer nearest you at: [www.cn.ca/damageprevention](http://www.cn.ca/damageprevention)**

## Track Structure & Supporting Roadbeds

must be maintained correctly to keep our employees, you and your shipments safe and to prevent derailments. The roadbed is designed to support the weight of the car while keeping the tracks evenly spaced. The track structure is carefully engineered around curves to “bank” the outside rail and counter lateral forces, which maintains an even weight distribution on both rails.

## Railcar Design Safety Issues

are a concern for everyone. The frame or body of a railcar sits on two centreplates, which allow the truck to rotate beneath the body and permits rail equipment to turn without excessive force on the gauge between the rails. Neither the car body nor the wheels are fastened to the trucks. Each component sits in place, primarily by weight. When a car is lifted, CN personnel must be called to inspect and ensure it is correctly positioned on the centreplate and bearings.

## Overloads

must be avoided in two ways:

- Observe the load limit stenciled on the side of the car.
- Ensure that the gross weight of the car and lading does not exceed the maximum weight capacity for the route to be travelled.



## Wheels & Bearings

need to be inspected by CN Mechanical personnel any time a car is derailed. Reporting all occasions when a car has derailed ensures that a proper inspection is arranged. Failing to report a derail and/or moving a car without inspection could lead to injuries and even a train derailment. Please don't compromise safety.

If a car derails at a speed of:

- Less than 10mph (or for less than 61 metres/200 ft) – the wheels, axle and bearings require inspection.
- Over 10mph (or for more than 61 metres/200 ft) – the wheels must be replaced.
- You must also be alert to any potential damage to bearings, and remember that if a bearing is ever submerged in water, it must be replaced.

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### Let us help

Need assistance in identifying your loading requirements?

Contact one of our specialists at [loadplan@cn.ca](mailto:loadplan@cn.ca)



# Safety Around Tracks

## Clearances – Maintaining the Safety Envelope Around Tracks

Clearance restrictions have been developed to protect the safety of people and equipment when moving railcars.

### **Restrictions for Spurs & Industrial Track**

In general, all equipment, materials or obstructions of any kind must be kept a minimum of 5 metres (15 feet) from the nearest rail unless a CN representative has placed a block on train movements. This includes temporary piles of stock, refuse containers, parked vehicles or other equipment, buildings and obstructions.

### **Restrictions for Main Track & Sidings**

Machinery and equipment cannot be operated within 30 feet (10 metres) of a CN main track or siding without CN authority and protection. This applies to all types of equipment, including snow clearing machinery.

Notify CN's Service Delivery Centre of the following cases:

- Any emergency situation causing an obstruction within the 5-metre (15-foot) clearance envelope.
- Any alterations to track-side loading platforms or change of location to loading ramps, unloading augers and other equipment must be communicated to the railroad.
- Holes, trenches and other ground obstructions.
- Protection arrangement required.

Clear sight lines at railroad crossings are a necessary part of railroad and community safety. Obstructions, such as snow piles, materials or equipment may affect the visibility of approaching train traffic at public or private railroad crossings.

# Taking Care of Your Tracks

## Inspect Regularly

It's important to inspect your track regularly for signs of defects and notify CN of any issues that would prevent the safe delivery or pickup of rail cars.

In Canada, most customer tracks are provincially regulated, and provinces typically require non-main track to be inspected, at minimum, on a monthly basis by a qualified track inspector. Records of inspections, defects found, and repairs made, should be maintained and accessible to CN if required.

## Be on the Lookout

A key safety concern is the accumulation of snow, ice, vegetation or debris at customer sites. It is critical for the safety of shipping and railroad personnel that your tracks be maintained and always in a safe condition, free of walking and operating obstructions that may cause a tripping hazard or car derailment. **It is especially important that flangeways at road crossings be clean and clear.**

Seasonal changes and periods of severe weather such as spring thaw and heavy rain can negatively impact track conditions. Standing and flowing water are the greatest hazards to track stability. Drainage systems are designed to channel water away from the track structure.

It is important to continuously monitor and maintain the track structure. Blocked culverts, water undercutting the track or standing pools of water adjacent to any track must be reported immediately to

**CN's 24-hour emergency line at 1-800-661-3963.**

## Work With Us

The cheapest and most efficient way to avoid problems is to catch them before they get too large, and repair them before they cause a derailment. These tracks are your responsibility but we are your partner. We will be happy to work with you and advise you on what needs to be repaired or if you are getting a fair price.

**To find more information on maintaining your tracks in the winter, please visit: [www.cn.ca/seasonalsafety](http://www.cn.ca/seasonalsafety)**

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## Think safety every time

Be sure to reference CN's Track Inspection Guideline to make sure that your tracks are constructed, inspected and maintained according to CN standards. You can find the guideline at **[www.cn.ca/trackinspectionguide](http://www.cn.ca/trackinspectionguide)**





## Transportation of Dangerous Goods & HAZMATs

If you ship dangerous goods/hazardous materials, complying with applicable regulations is a must, as it reduces the potential of exposure to people, our communities and environment.

### **When shipping security-sensitive materials:**

- Review storage locations and procedures to ensure appropriate security for various threat or alert levels.
- Notify your CN Service Delivery Representative and arrange to expedite the acceptance and delivery of the shipment.

Security-sensitive materials are those that pose a significant risk to national security when being transported as defined by all applicable Canadian and U.S. federal rules and regulations. Current U.S. definitions include Class 1.1, 1.2 or 1.3 explosives; Class 7 (radioactive) material; and poisonous inhalation hazard (PIH) or toxic inhalation hazard (TIH) commodities.

TIH / PIH materials are gases or liquids that are known or presumed to be toxic to humans (such as chlorine, anhydrous ammonia and sulfur dioxide).

## Key Dangerous Goods & HAZMAT Safety Initiatives

**CN's Safe Handling Awards Program** – Launched in 1992, exclusive awards are presented to customers that load cars with dangerous goods and meet strict standards for the safe handling and shipment of regulated products.

**North American Non-Accident Release (NAR) Task Force** – With the goal of reducing NARs (an industry term to describe a tank car that has been found leaking, but has not been involved in an accident) on railroads; shippers, industry associations and railroads represent the task force.

**CN 911 Training Tank Car** – CN 911 Training Tank Car and Training Trailers are valuable tools used to assist with training first responders in railway emergency preparedness and planning, and to increase understanding of the precautions taken to safely transport dangerous goods.

**TransCAER** (Transportation Community Awareness and Emergency Response) – A training program for communities situated near rail lines where dangerous goods are transported. CN and partner chemical companies conduct information sessions for community leaders and first responders.

## Best Shipping Practices

- 1 Develop and implement a policy for loading and securement.
- 2 Inspect valves and manways for tightness (a leading cause of leaks in rail transport incidents).
  - After loading, conduct a pressure test consistent with industry standards.
  - All valves, packing gland nuts, closures and flanges should be checked with a leak detection solution or appropriate metering equipment.
  - After completing the leak test, pressure should be released.
  - If a pressure test is impractical or unsafe, the car should be held and reinspected after 24 hours, and valves and fittings retightened as needed to ensure proper securement.
- 3 Ensure data is complete on shipping papers.
  - Bill of Lading and Shipping Instructions are required for your loaded railcar before movement (see CN Tariff publication CN 9000).
  - You can submit this information electronically to CN. Contact CN's eBusiness Support Team at 1-800-361-0198 with any questions regarding CN's online tools or EDI.

- 4 Have proper placarding in place for all Dangerous Goods/HAZMAT shipments.
- 5 Ensure that the Emergency Response Plan is correct and updated for plant sites and transportation-related releases.
  - Have an Emergency Response drill annually.
  - Show a proper Emergency Response Assistance Plan (ERAP) number and associated phone numbers on dangerous goods subject to ERAP requirements of Transport Canada (not applicable in the U.S.).
  - Ensure that emergency contacts and phone numbers for the railroad and plant site are correct and updated regularly.
- 6 Follow key training activities.
  - All railroad personnel who enter your plant site must be properly trained and/or receive orientation (especially for emergency actions).
  - Implement a tank car securement training program with reporting procedures for poor securement and hard to operate valves.
  - Establish and educate staff on preventive maintenance practices for tank cars.
- 7 Verify that rail crossings within the plant site are properly marked with warning signs.
- 8 All rail lines are clear, switches are aligned properly, and car brakes are always released before moving cars.
- 9 Have plant personnel closely observe rail crews when they are operating to ensure plant and rail safety are being maintained.
- 10 Implement a documented process for providing feedback to the rail carrier.
- 11 Ensure consignees/end users handle your products in a manner that is consistent with Responsible Care®.

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## Doing it the right way

For additional information on loading tank cars, please refer to AAR/BOE Pamphlet 34: *Recommended Methods for the Safe Loading and Unloading of Non-Pressure and Pressure Tank Cars*



## Damage Prevention

Whether you ship with boxcars, open tops or intermodal containers, our Damage Prevention team can help you prepare for safe, damage-free shipping. Our team is adept in safe loading standards; they will work with you to ensure your freight is loaded in compliance with AAR Loading Guidelines, Transport Canada and Federal Railroad Administration (FRA) regulations.

The Damage Prevention team has everyone's safety in mind; they are a part of the AAR's Quality Lead Teams, working collaboratively, with members of other Class 1 railroads, to review and finalize the rail rules and regulations used throughout North America.

### **Contact our experts for assistance with:**

- Load balancing and securement.
- Teaching safety practices to you and your employees, including equipment handling.
- Reviewing or creating customer load plans to ensure AAR compliance.
- Investigating repetitive damage issues and making recommendations for improvements.
- Conducting safety audits on contractors, customers and auto compounds.

**To find your regional Damage Prevention officer, please visit: [www.cn.ca/damageprevention](http://www.cn.ca/damageprevention)**

# Prepare for Winter

Winter can be a very challenging time for a railroad, which is why we have undertaken many initiatives to minimize its impact on operations. But we need your help to ensure that the service we provide you can remain safe and seamless. Many of the service disruptions centre on accumulations of snow and ice. On the track, snow mostly constitutes a problem in switches, as well as at crossings — so once the snow is cleared, the problem is solved.

Seeing to these issues before our crews arrive to service you will minimize any delays and will also minimize the risk of injuries and derailments. If you have a turnout on your property, please keep the point area clear as snow can hold a point open enough to cause it to gap and cause a derailment, this is a major concern in the flangeway of road crossings as well.

When you are dealing with snow and ice conditions please think of the safety of our crews as they will be dropping off equipment on your property. Anything you can do to cut down on the ice, snow, and debris in the walkways would be appreciated.

## **Using this winter checklist will help ensure our crew remains safe while on your property:**

- Clear snow which has slipped from adjacent roof tops onto the siding track.
- Trackside windrows should be salted or sanded with snow cleared by 4-5 ft to allow our crews to safely walk by cars during inspections.
- Inspect the siding before service by train crews.
- Keep all switches and flangeways free of snow, ice and debris (this includes the switch points and the area in which employees stand to operate switches).
- Flangeways must be cleared to a minimum depth of 1.5 inches to ensure equipment can be carefully operated through the track.
- Maintaining switches prior to the winter season will help keep switches less resistant and easier to line up. Attempting to line up a stiff switch can lead to back, leg and arm injuries.
- Remove ice, apply sand or salt to walking areas.
- Derails need space to open so they must be cleared of surrounding snow, ice and debris. If a derail is not completely flipped open, it can sit high and strike moving equipment, cause damage and even a derailment.

**Guidelines for all seasons can be found at: [www.cn.ca/seasonalsafety](http://www.cn.ca/seasonalsafety)**

# Safety Resources



# While on Our Property

Railroad facilities can be risky places to be. To reduce risk, the following safety rules apply to everyone on CN property — including our employees, you our customer, and the personnel of all contractors.



## Hard hats

Required on CN property (except when in a vehicle or building).



## Reflective apparel (vests, clothing)

Required on CN property (except when in a vehicle or building).



## Seat belts

Required in all equipped vehicles.



## Fall protection equipment

Required when working at a height (e.g. top of rail cars), proper training in its application is required as well.



## Special circumstances

Such as in confined spaces or overly noisy workplaces, additional protection (e.g. ear plugs, respirators, etc.) may be needed.



## Safety glasses

With permanent side shields are required in all areas (except for buildings).



## Safety boots

Required on CN property (excluding offices).

Protective footwear shall meet or exceed the standards set out in Canadian Standard Association – CSA Z195 and/or American Society for Testing and Material – ASTM F 2413. Protective footwear must support and cover the ankle, have a defined heel, have toe and compression protection, puncture resistance protection, and must have the appropriate standard markings on the footwear.

Details on our safety rules are available from CN supervisors, your Service Delivery Representative or CN's Safety department. In addition to being compliant with the requirements of CN's Customer Safety Handbook, customers and their contract personnel working on CN property must receive qualification under CN's Contractor Orientation course, at [www.contractororientation.com](http://www.contractororientation.com)

# Key Contacts & Resources

## CN

935 rue de La Gauchetière West  
Montreal, Quebec H3B 2M9

Safety Department: [www.cn.ca/safety](http://www.cn.ca/safety)

Damage Prevention: [loadplan@cn.ca](mailto:loadplan@cn.ca)

Damage Prevention officers contact details:

[www.cn.ca/damageprevention](http://www.cn.ca/damageprevention)

General Information: 1-888-888-5909

## Railway Association of Canada (RAC)

99 Bank Street Suite 901  
Ottawa, ON K1P 6B9

Phone: 613-567-8591

Fax: 613-567-6726

E-mail: [rac@railcan.ca](mailto:rac@railcan.ca)

[www.railcan.ca](http://www.railcan.ca)

## Association of American Railroads (AAR)

425 Third Street, SW  
Washington, DC 20024

Phone: 202-639-2100

[www.aar.org](http://www.aar.org)

### **Responsible Care®**

CN is a partner, both in Canada and the United States, in Responsible Care®, an ongoing performance improvement initiative established by the Chemistry Industry Association of Canada (CIAC), and the American Chemistry Council (ACC). Transportation partners commit themselves to continuous improvement in the areas of employee and public health and safety, and to environmental quality. The principles of Responsible Care® recognize the importance of minimizing risks, meeting or exceeding regulations and standards, and communicating openly with employees and communities. The principles are applied to all of CN's activities, while protecting the environment for the communities we serve.

### **Responsible Care® Model for Transportation Partners**

The Responsible Care® Transportation Partnership initiative is designed to support customers in improving the performance of chemical transportation. Partner companies commit to the same general guiding principles as other members from the CIAC and the ACC. The Partnership initiative is tailored to focus on four major themes directly relevant to the nature of partner company operations : Health and Safety, Environment, Security and TransCAER.



# Emergency Situations – 24-hour Key Contacts

## CN Network Operations Centre

1-800-661-3963

- Derailment of any railcar.
- Leak or suspected leak of any tank car or other dangerous commodity on CN property.
- Equipment or materials within the main track or siding clearance envelope (8 m/25 ft from nearest rail).
- Damage to any switch, derail, sign, rail or track structure.
- Any other condition or situation which might cause injury, damage or derailment.

## CN Police

1-800-465-9239

- Trespassers, vandalism, damage to CN property.
- Railroad crossing concerns, violations, accidents.

## CN Service Delivery Centre

1-866-926-7245

- Changes to any structures, ramps, loading docks, ground conditions, temporary piles, parked vehicles, etc., within the track clearance envelope for industrial track:
- Height 6.71 m (22 ft) above the rail.
- Side clearances:
  - Top of rail to 1.22 m above rail requires side clearance of 1.83 m/6 ft\*
  - Over 1.22 m above the rail requires side clearance of 2.44 m/8 ft\*
- Damage to any railcar, including ladders, doors, couplers, etc.
- Unless explicitly permitted by CN, no work shall take place within 8 m/25 ft of the nearest rail except in the presence of a CN representative.
- Derails left unlocked or in a non-derailing position.

\*From the centre of the track.





