

GN 6-54 Rail Emergencies

Guidance to fire departments to ensure the safe response to rail, light rail, elevated rail and subway emergencies.

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Background

Communities across Ontario are home to train rail lines, and with these rail operations come the potential for a variety of emergencies, each with their own hazards.

In addition to traditional rail, several urban communities have light rail systems that run through regular transit corridors. Additionally, some large urban municipalities have below grade (subway) rail systems and elevated rail systems, each with their own unique hazards.

Concerns/hazards

The response to rail emergencies, whether traditional, light, elevated or below grade come with a variety of hazards that require training and procedures to safely mitigate.

Rail emergencies may include train derailment, collisions with people, collisions with vehicles at rail crossings, fires and the release of dangerous goods.

Actions for employers

Employers should:

- Provide training to firefighters to prepare them for the response to these emergencies, including the identification and mitigation of hazards.
- Identify and work with rail operators who often partner with fire departments to provide training and joint exercises. Use this liaison to ensure the fire department has access to information, can conduct familiarization and pre-planning tours and to train and exercise jointly.
- Identify the dangerous goods that are most frequently being transported through jurisdictions and include this in training and pre-planning programs.
- Pre-plan rail locations, including identifying access points, potential evacuation zones, identifying water supply options, people occupying in close proximity to tracks, ensuring updated contact information and more.
- Develop procedures for the response to rail emergencies.

Considerations

- Specific to traditional rail emergencies
 - Identify rail crossings and access points within the community
 - Determine if rail is passenger, cargo or a mix of the two
 - If cargo, determine if dangerous goods are transported and in what quantity and configuration
 - Determine how to stop rail traffic in an emergency and ensure dispatch is equipped with the appropriate contact information
 - Be aware of the (rare) possibility of a runaway rail car
 - Never operate on rail lines or park apparatus on or stretch hose lines across rail lines, even when a request to stop rail traffic has been made
 - Be aware that on bridges, tunnels or underpasses there is almost never enough side clearance for a person to stand as a train passes

- Specific to below grade (subway) rail emergencies
 - Ensure firefighters know how to access subways both through stations and emergency access points
 - Be aware of radio communication limitations when working below grade, and pre-plan all areas to understand the extent of these limitations
 - Train and equip firefighters to operate in subway tunnels
 - Train firefighters to identify and avoid the third rail, and disable power to the tracks
 - Pre-plan to identify hazards specific to below grade (subway) rail lines
 - Train on the specific hazards and operations related to below grade (subway) rail lines
 - Determine how to stop rail traffic in an emergency and ensure dispatch is equipped with the appropriate contact information
 - Be aware that on bridges, tunnels or underpasses there is almost never enough side clearance for a person to stand as a train passes

- Specific to elevated rail emergencies
 - Ensure firefighters know how to access elevated rail lines at all points that the train may stall
 - Identify how train car occupants will evacuate, and how firefighters will access and rescue them in an elevated setting
 - Pre-plan to identify hazards specific to elevated rail lines
 - Train on the specific hazards and operations related to elevated rail lines
 - Determine how to stop rail traffic in an emergency and ensure dispatch is equipped with the appropriate contact information
 - Be aware that on bridges, tunnels or underpasses there is almost never enough side clearance for a person to stand as a train passes

- Specific to light rail emergencies
 - Identify rail crossings and access points within the community
 - Determine how to stop rail traffic in an emergency and ensure dispatch is equipped with the appropriate contact information
 - Be aware of the (rare) possibility of a runaway rail car

- Never operate on rail lines or park apparatus on or stretch hose lines across rail lines, even when a request to stop rail traffic has been made
- Be aware that on bridges, tunnels or underpasses there is almost never enough side clearance for a person to stand as a train passes
- Pre-plan to identify hazards specific to light rail lines
- Train on the specific hazards and operations related to light rail lines

Applicable regulations and acts

Read:

- [Occupational Health and Safety Act](#)
 - clause 25(2)(h) for taking every precaution reasonable to protect workers

Relevant standards

- NFPA 130 – Standard for Fixed Guideway Transit and Passenger Rail Systems
 - Transport Canada Protective Direction No. 36
 - Emergency Response Guide
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Related

Guidance Note 6-52: Firefighter Safety Working Around Rail Lines

Resources

Railway Association of Canada – Emergency Response Awareness Guide

<https://www.railcan.ca/wp-content/uploads/2023/02/RAC-Railway-Emergency-Response-Awareness-Guide-February-2023-Final.pdf>

AskRail app - [AskRail Mobile App](#)