What Employers Need to Know to Keep Roadside Workers Safe

Does your company have employees working on or beside the road? This document outlines what employers need to know and implement to keep their roadside workers safe.

Roadside work can be dangerous. Between 2011 and 2020, 12 roadside workers were killed and 207 were injured and missed time from work in BC as a result of being hit by a motor vehicle. For the safety of your employees, read this document and the resources highlighted in it, and take action to protect your workers.

Employers’ overall responsibilities

- The Workers Compensation Act stipulates that every employer must ensure the health and safety of all workers working for the employer, and any other workers at a workplace where the employer’s work is being carried out. See General duties of employers in the Workers Compensation Act.

- The Occupational Health and Safety Regulation (OHSR) contains legal requirements that must be met in most BC workplaces. Employers are responsible for complying with these requirements, located in various sections of the OHSR. Become familiar with the OHSR sections that apply to your work zones. See Occupational Health and Safety Regulation.

The OHSR also outlines the legal responsibility that BC employers have with traffic control: “The employer must ensure that effective traffic control is provided and used whenever traffic could be hazardous to a worker.” See Part 18: Traffic Control in the OHSR for traffic control requirements.

As well, the OHSR specifies that traffic control equipment, arrangements, and procedures must meet the requirements of the latest edition of the Traffic Management Manual for Work on Roadways (“Traffic Management Manual”) issued by the Ministry of Transportation and Infrastructure (MOTI) in January 2020. See the Traffic Management Manual on the MOTI website.

- The goal of effective traffic management is to protect workers and accommodate road users while work is underway on provincial and municipal roads. Become familiar with the fundamentals of traffic management and traffic control. See Part A: Traffic Management in the Traffic Management Manual.

Hierarchy of controls to mitigate traffic risk

One of the most important principles of traffic control is the Hierarchy of Controls, which outlines control methods in priority sequence; control methods at the top of the image are potentially more effective and protective than those at the bottom. These controls should be followed in the order listed in the graphic below, to manage interaction between road users and the work zone and to reduce risk.

<table>
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<th>Hierarchy of Controls to Mitigate Traffic Risks</th>
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<td>Use the hierarchy of controls below to manage interaction between road users and the work zone. Most work zones will require a combination of these controls.</td>
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- **Elimination/Substitution**: Includes the use of detours, alternate routes or barriers.
- **Engineering Controls**: Includes the use of crash attenuator or traffic control devices.
- **Administrative Controls**: Includes the use of procedures and scheduling work for when traffic volumes are lower.
- **Traffic Control Persons**: Use of appropriately trained and equipped traffic control personnel.
Identifying hazards, assessing risks and developing a traffic management plan

Keeping principles such as the Hierarchy of Controls in mind, create a traffic management plan that details strategies for protecting workers and safely and efficiently moving road users through your work zone. There are three categories of projects:

- Category 1 (minimal impact on the travelling public)
- Category 2 (may be located on higher-speed or higher-volume corridors and involve some complexity)
- Category 3 (complex and have a significant impact on the travelling public)

Each category has different requirements and traffic management plans. To determine the category of your project:

- Identify the roadway and traffic hazards.
- Assess the project-specific risks.
- Combine the initial assessment with the risk analysis to determine the project category.

For information on traffic management plans, including how to analyze risk, see Section 3: Traffic Management Plans in the Traffic Manual.

Consider using one of the templates for the three categories of traffic management plans in Appendix C: Templates for Traffic Management Plans in the Traffic Management Manual.

Traffic control layouts

Plan the traffic control layout you will use in your work zone. First, gain a thorough understanding of Section 6: Traffic Control Layouts – General Instructions. Then review the traffic control layouts for two-lane/two-way roadways, multilane undivided roadways, multilane divided roadways, and other scenarios in Sections 7-19 in the Traffic Management Manual.

Document your planned traffic control layout. The layout should include use of signs, cones, and other traffic control devices. Schedule regular inspections of the work zone to ensure work zone set-up follows the planned layout. Ensure that any changes made are documented.

Traffic Control Manager

The prime contractor appoints the Traffic Control Manager, who is responsible for preparing, implementing, and managing the traffic management plan and sub-plans. This involves reviewing, evaluating, and approving details in the Traffic Control Plan – a sub-plan of the traffic management plan – including traffic control layouts. The role of Traffic Control Manager should only be assigned to qualified people who have suitable traffic management experience and training. See Section 1.2: Road Authority and Prime Contractor Responsibilities in the Traffic Management Manual.

Traffic Control Supervisor

The prime contractor designates a Traffic Control Supervisor who is qualified to assume the responsibilities of this function. In general, the Traffic Control Supervisor is responsible for the following:

- Oversee traffic control operations, ensuring traffic control is executed in accordance with the Traffic Control Plan, and updated as necessary.
- Ensure compliance with Part 18 of WorkSafeBC’s OHSR.
- Provide direction to Traffic Control Persons.
- Required traffic control devices are in place.
- Signs are checked, maintained, and moved as required.
- Daily traffic control setups are documented, and changes are identified in the Traffic Control Plan or log book.
- Traffic concerns are reported to the Traffic Control Manager or Site Supervisor.
- Each member of the traffic control crew wears the required personal protective clothing and equipment.

Temporary traffic control devices and traffic control plans

Temporary traffic control devices are signs, signals, markings, and other devices used to regulate, warn, and guide road users through or around roadway construction, maintenance, or utility work. In a traffic control plan, outline the temporary traffic control devices that will be used in your work zone. Become familiar with the device options that are available and ensure your work vehicles are stocked with the proper equipment. Inspect your traffic control devices regularly to ensure they are in good working condition.
For more information, see:

- **Section 3.21: Traffic Control Plan**
- **Section 4: Temporary Traffic Control Device in the Traffic Management Manual**
- **Improving Worker Safety: Temporary Traffic Control Devices** on ConeZoneBC.com.

**Traffic Control Persons**

*Use of Traffic Control Persons*

Traffic Control Persons (TCPs) may be used only:

a. if the use of signs and other traffic control devices and procedures alone cannot provide effective traffic control, or

b. during emergency or brief duration work if it is not practicable to control traffic with signs and other devices and procedures.

For more information, see:

- **Part 18.6: Use of a traffic control person in the OHSR.**
- **Section 5.2: Use of TCPs in Work Zones** in the Traffic Management Manual.

*Training*

TCPs must receive approved training and pass an examination before they are assigned to work within a work zone. They must carry proof of training while on the job (Section 5.3.2 in the Traffic Management Manual).

For more information, see:

- **Section 5.3: Minimum Requirements for TCPs** in the Traffic Management Manual.
- **Traffic Control Program of the BC Construction Safety Alliance** (BCCSA), the WorkSafeBC-approved certifier of all high-risk TCPs in BC.

*Clothing*

TCPs must wear appropriate high-visibility garments specified in the Traffic Management Manual. Inspect workers’ garments regularly to ensure they are clean and in good usable condition – not torn or faded.

For more information, see:

- **Section 5.4: Work Zone Apparel and Equipment** in the Traffic Management Manual
- **Part 8: Personal Protective Clothing and Equipment** in the OHSR
- **High Visibility Garments** on the Cone Zone website.

Ensure TCPs at your work zone understand and are aware of:

- Your organization’s safe work procedures for roadside work.
- Hazards at the work zone and how to protect themselves.
- The traffic control layout at the work zone.
- Who is responsible for design and set-up of the work zone.
- Escape routes in case vehicles cross over into the work zone.
- Procedures and contact information in case of an emergency incident.

Also ensure:

- Supervisors conduct a daily safety briefing before work begins.
- Records are kept of worker training and safety communications.

See ConeZoneBC.com for more information on roadside worker safety.

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1, 2 Currently under regulatory review