British Columbia's Preferred Practices for Occupational Road Safety

The Occupational Road Safety Partnership

Road Safety At Work is an initiative of the Occupational Road Safety Partnership. The Partnership was formed in 2009 to reduce the number of work-related motor vehicle crashes in BC and help keep our workers safe while they drive on the job.

The Founding Partners

The goal of the **Justice Institute of BC**'s road safety and driver education programs is to produce safer drivers and riders leading to a reduction in collisions on our roadways. Our education programs enhance and improve current driving skills and teach road safety for life.

WorkSafeBC is a statutory agency dedicated to promoting workplace health and safety for the workers and employers of British Columbia. Our vision: Workers and workplaces safe and secure from injury, illness and disease.

Our Shared Commitment

Working together, we can improve worker safety on British Columbia's roads by reducing motor vehicle crashes.

Traffic crashes are preventable.

Contents

Introduction

Motor vehicle crashes are BC's leading cause of traumatic injuries and deaths in the workplace.

British Columbia's preferred practices for occupational road safety are based on the best practices used internationally. The Occupational Road Safety Partnership (ORSP) worked with a number of stakeholders who contributed their time and expertise to the development of BC's preferred practices through research, discussion and collective judgement. An Occupational Road Safety Technical Advisory Committee (TAC) was formed and provided an avenue for collaboration with key stakeholders. Committee members come from a variety of BC workplaces, large and small, public and private, and from a range of different employment sectors.

British Columbia's Preferred Practices for Occupational Road Safety is an educational guide and reference tool to help reduce injury and death due to worker-related motor vehicle incidents. The practices are organized under five steps an organization can take to develop and maintain a successful occupational road safety program:

❏ Step 1: Get Management Commitment

❏ Step 2: Do a Status Review

❏ Step 3: Identify Risks and Hazards

❏ Step 4: Develop Strategies

❏ Step 5: Plan for Action

BC's Preferred Practices: Summary Statements

1.0 Get Management Commitment

Management is committed to and supports an effective occupational road safety (ORS) program.

1.1 Data Management

Management ensures that incident data and other appropriate data is collected, analyzed and managed to ensure continuous improvement in occupational road safety.

1.2 Resources

Management ensures that appropriate financial and other resources are allocated to occupational road safety programs and activities.

1.3 Communications

Management demonstrates excellent, consistent communications regarding occupational road safety.

1.4 Organizational Structures

Management ensures that organizational structures to support an occupational road safety program are in place.

1.5 Occupational Road Safety Policies and Procedures

Management implements and supports policies and procedures to facilitate development, maintenance and improvement of occupational road safety programs.

1.6 Management Style

Management style facilitates effective occupational road safety within the organization.

2.0 Do a Status Review

The organization conducts status reviews:

- **When starting a new ORS program**
- **Regularly in an established ORS program**

2.1 Do a Safety Audit

Safety audits are done before developing an ORS program and on at least an annual basis.

2.2 Collect and Analyze Data

Data is collected and analyzed to identify problem areas within the organization.

2.3 Conduct a Risk Assessment

Risk assessments are done on a regular basis to identify the organization's road safety risks.

2.4 Consult with Employees

Consultation with employees is done when developing an ORS program or improving an existing ORS program.

3.0 Identify Risks and Hazards

On a regular basis, the organization compiles a list of the most significant risks, hazards and problems.

4.0 Develop Strategies

The organization ensures strategies are developed and implemented to address the most significant road safety risks, hazards and problems.

5.0 Plan for Action

ORS action plans are developed using a structured process.

1.0   Get Management Commitment: BC's Preferred Practices

Management is committed to and supports an effective occupational road safety (ORS) program with the following essential components:

❏ Data management system

❏ Resources

❏ Communications

❏ Organizational structures

❏ ORS policies and procedures

❏ Effective management style

1.1   Data Management

Management ensures that incident data and other appropriate data is collected, analyzed and managed to ensure continuous improvement in occupational road safety. This includes:

❏ Collecting sufficient incident data to identify problem areas and improvements

❏ Regularly reviewing incident data, assessments, audits and evaluations to:

- Improve the ORS program

- Inform training

❏ Benchmarking performance:

- Within the organization

- Against other organizations

1.2   Resources

Management ensures that appropriate financial and other resources are allocated to occupational road safety programs and activities. This includes:

❏ Finance models that support and sustain:

- Insurance

- Vehicle assets

- Training

- ORS program funding and infrastructure

❏ An understanding of the cost-benefits of safe driving

❏ Decisions related to the ORS program and activities are based on sound business cases

1.3 Communications

Management demonstrates excellent, consistent communication regarding occupational road safety. This includes:

❏ Communicating to all levels of the organization regarding the importance of driving safety

❏ Regularly attending meetings with the employee(s) responsible for occupational road safety (e.g., Fleet Safety Manager, Health and Safety Supervisor) and review of reports relating to occupational road safety

❏ Periodically attending meetings of internal committees or groups that advise on ORS programs and activities

❏ Communicating to vehicle drivers about potential occupational road safety risks and how to minimize them

❏ Making efforts to seek input from workers

❏ Educating employees about the importance and usefulness of sharing incident information

❏ Utilizing opportunities such as training sessions to:

  • Teach skills

  • Emphasize corporate safety messages

  • Discuss driving professionalism

❏ Recognizing safe behaviours and focussing on the positive

❏ Endorsing ORS manuals and/or handbooks

❏ Creating and distributing a safety pledge to show commitment to road safety (once other program infrastructure and programming is in place)

1.4 Organizational Structures

Management ensures that organizational structures to support an occupational road safety program are in place. This includes:

❏ Structured systems for:

  • Occupational road safety training

  • Employee orientation to the occupational road safety program

  • Ongoing guidance as required

  • Occupational road safety incident reporting

❏ A person responsible for steering occupational road safety initiatives

❏ A cross-functional steering group to engage internal stakeholders

❏ A senior or board-level ORS champion (once other program infrastructure and programming is in place)

1.5 Occupational Road Safety Policies and Procedures

Management implements and supports policies and procedures to facilitate development, maintenance and improvement of ORS programs. This includes:

❏ Establishing occupational road safety policies and procedures

❏ Supporting the establishment and maintenance of a risk assessment program

❏ Regularly reviewing and signing-off occupational road safety policies and procedures

❏ Making efforts to involve the workforce in the development of ORS policies and procedures

❏ Allowing time for employees to learn ORS policies and procedures

❏ Empowering staff to implement ORS policies and procedures

❏ Demonstrating an awareness of ORS policies and procedures

❏ Adopting preferred practices for ORS to minimize the inherent risks presented by occupational driving

1.6 Management Style

Management style facilitates effective occupational road safety within the organization. Managers:

❏ Accept accountability for their actions

❏ Show receptivity to change

❏ Show passion for safety

❏ Demonstrate proactive, innovative thinking

❏ Lead by example

2.0 Do a Status Review: BC's Preferred Practices

The organization conducts status reviews:

❏ When starting a new ORS program

❏ Regularly in an established ORS program

The complete status review consists of:

❏ Safety audits

❏ Analysis of data

❏ Risk assessment

❏ Employee consultation

2.1 Do a Safety Audit

Safety audits are done before developing an ORS program and on at least an annual basis. The safety audit includes a review of practices related to:

❏ Management systems

❏ Risk assessments

❏ Driver management

❏ Vehicle management

❏ Journey management

❏ Incident management

2.2 Collect and Analyze Incident Data and Costs

Data is collected and analyzed to identify problem areas within the organization. This includes analysis of:

❏ The human causal factors related to crashes

❏ Overall organizational incident data

❏ Data related to individual drivers

❏ Number of incidents per 100,000 km driven

❏ Costs of:

- Repairs per 100,000 km driven

- Different types of incidents

- Hidden costs, such as lost productivity and absences from work

Data Collection

Data including the following is collected regarding incidents, incident information, vehicles, drivers and journeys:

Incident

❏ **Fault**	❏ **Road surface:**	❏ **Incident type:**	❏ **Total cost of incident to organization:**
❏ **Location**	- Gravel	- Rear-end	- Injuries
❏ **Underlying cause**	- Paved	- Head-on	- Vehicle repair
❏ **Immediate cause**	- Mixed	- Side	- Loss of productivity
❏ **Witnesses**	- Under construction	- Roll-over	- Time off due to injuries
❏ **Speed of vehicle**	❏ **Road type:**	- Off road	- Administration
❏ Conditions:	- Private	- Near miss	❏ **Injuries:**
- Road	- Public	- Vandalism	- Driver(s)
- Weather	- Parking lot	- Theft	- Passenger(s)
- Visibility	- Residential	❏ **Movement of vehicle:**	- Others (pedestrians, other vehicle occupants, etc.)
- Traffic	- Arterial route	- Reversing	- Treatment
❏ **Road configuration:**	- Highway	- Going straight	- Cost of treatment
- Intersection		- Changing lanes	
- Curve		- Doing U-turn	
- Straightaway		- Pulling out	
- Parking area		- Stopping	
- Roundabout		- Parking	
- Gradient			

Driver

❏ **Driver licence information:**	❏ **Medical conditions:**	❏ **Human factors:**	❏ **Utilization of safety devices:**
- Number	- Diabetes	- Speed	- Seat belt
- Type	- Vision	- Aggressive driving	- Child seat
- Status	- Sleep apnea	- Vision	- Anti-lock braking systems (ABS)
❏ **Driver Injuries**	- Heart disease	- Decision-making	- Back-up alarms
- Time off due to injury	- Stroke	- Fatigue	
- Status	- Cognitive impairment	- Distraction	
		- Impairment	

Vehicles

❏ **Vehicle type:**	❏ **Vehicle information:**	❏ **Vehicle signals:**	❏ **Vehicle damage:**
- Car	- Ownership	- Type present	- Damage
- Passenger van	- Defects	- Working order	- Impact of damage
- Utility van	- Kilometres		- Repair cost
- Bus	- Age		
- Truck	- Air bag deployment		

Journeys

❏ **Purpose of vehicle use:**	❏ **Planned route:**	❏ **Time:**	❏ **Distance**
- Delivery	- On planned route	- Peak or low traffic time	- Km driven that shift
- To attend meeting	- Direction of travel	- Time since beginning of shift	- Km driven that journey
- Sales visit			

2.3   Conduct a Risk Assessment

Risk assessments are done on a regular basis to identify the organization's road safety risk. Risk assessments are done for:

❏ The entire organization

❏ Groups or divisions with the organization

❏ Individual drivers when:

- Recruited

- Involved in an incident

- Convicted of a violation related to driving

- A complaint of the individual's driving is received

- The driver has been diagnosed with a serious illness or injury that could affect driving performance

A risk assessment of an individual driver includes a review of the driver's:

❏ Attitudes about risk and driving

❏ Exposure to risk and type of driving

❏ Skills (including credentials and experience)

❏ Violations

❏ Involvement in crashes and near misses

❏ Fitness to drive (e.g., medical conditions)

❏ Knowledge

❏ Behaviour

❏ Hazard perception

❏ References (pre-hire)

❏ Substance use screening information

2.4 Consult with Employees

Consultation with employees is done when developing an ORS program or improving an existing ORS program. Through this process, valuable input is obtained from employees on:

❏ Policies and procedures

❏ Safety leadership

❏ ORS program development

❏ Issues

❏ Safety climate

❏ Safety culture

The information is gathered from:

❏ Informal discussions

- 'Tool-box' chats

- Debriefing sessions

- Lunchtime events

- As part of other events

❏ Formal discussions

- Focus groups

- Guided discussion

❏ Surveys

- Online

- Written

3.0   Identify Risks and Hazards: BC's Preferred Practices

On a regular basis, the organization compiles a list of the most significant risks, hazards and problems by:

❏ Reviewing the results of a status review

❏ Estimating the associated costs for each hazard, risk or problem

❏ Prioritizing the risks, hazards and problems

❏ Determining the organization's level of control over each risk, hazard or problem

4.0 Develop Strategies: BC's Preferred Practices

The organization ensures strategies are developed to address the most significant risks, hazards and problems. Strategies are aimed at:

❏ Vehicles

❏ Journeys

❏ Drivers

The following recommended strategies are considered:

4.1 Vehicles

Policies and procedures related to vehicles are written and include the following components:

Vehicle selection policy

Includes statements on:

❏ Minimum safety standards and features

❏ Appropriate vehicle for its intended purpose

❏ Vehicle size and power

❏ Required training for type of use

Safety technology policy

Includes statements on:

❏ Audible reverse alarms

❏ Following distance warning devices

❏ Electronic stability control (ESC)

❏ Driver fatigue monitoring devices

❏ GPS

❏ Telematics to measure driving performance

Vehicle replacement policy

Is based on vehicle's:

❏ Age

❏ Condition

❏ Crash involvement

❏ Damage

Vehicle inspection procedures

Includes requirements for:

❏ Pre-trip inspections

❏ Periodic professional inspections

Maintenance and repair standards

Includes:

❏ Schedules

❏ Required documentation

❏ Required guidelines and standards that as a minimum are stated in:

- BC *Motor Vehicle Act*

- BC's Commercial Vehicle Safety and Enforcement's (CVSE) *Vehicle Safety and Inspection Standards*

- Owner's manuals

Written documentation

Includes:

❏ Maintenance records and schedules

❏ Inspection records and schedules

❏ Fuel consumption records

❏ Crash involvement for each vehicle

❏ Employee responsibilities relating to vehicles

Grey fleet policy

The organization develops specific policies to govern the responsibilities and expectations of both workers and employers in organizations making use of a grey fleet. (Grey fleet refers to drivers using their own private vehicles for work.) This includes:

❏ A definition of 'work-related travel' or 'company business'

❏ A listing of the responsibilities of all stakeholders

❏ Vehicle safety standards

❏ Vehicle risk assessment procedures

❏ Procedures and standards for inspections, maintenance and repairs

❏ Driver standards

❏ Compensation structure and claim procedures

4.2   Drivers

The organization develops strategies to control risks faced by employees who drive while they are working. Strategies relating to drivers include the following:

Written documentation

Records including the following are retained:

❏ Driver licences and driver abstracts

❏ Records of training

❏ Records of driver performance, including incident involvement and corrective action

❏ Incident reports

❏ Driver log books

Safe driving policy

A safe driving policy is developed in consultation with those who drive for work and other stakeholders and includes:

❏ Statements on the organization's:
  - Commitment to road safety and to improving the organization's road safety
  - Position on key issues affecting drivers:
    - Mobile devices
    - Journey planning
    - Fatigue management
    - Seat belt use
    - Vehicle maintenance
  - Responsibilities of drivers, managers, supervisors
  - The level of driving competence required
  - Information and training provided to employees who drive

❏ A requirement that drivers report:
  - Issues that may affect their ability to drive safely
  - Any traffic violations

❏ An overview of procedures related to :
  - Emergencies
  - Incidents
  - Incident investigations

❏ Use of data for program improvement

Safe driving handbook

A safe driving handbook communicates and supports the organization's safe driving policy. It includes:

❏ Rules of the road and general safe driving tips
❏ Information on:
  - Aggressive driving
  - Impaired driving
  - Speeding
  - Fatigue
  - Distracted driving
  - Use of mobile devices

❏ Journey planning

❏ Health and medical conditions

❏ Use of safety equipment

❏ Driver licensing requirements

❏ Driver training requirements

❏ Pre-trip inspections

❏ Incident reporting procedures

❏ Emergency procedures

❏ Driving and the environment

❏ Economical driving

❏ Delivery procedures

Safe driving pledge

Drivers and employers are required to sign a safe driving pledge: an agreement in which drivers agree to obey the rules of the road and organization policies, and employers agree to manage the safety of drivers.

Recruitment, selection and induction procedures

Recruitment, selection and induction procedures include:

❏ Recruitment:

  • Defined terms of reference

  • A list of driving tasks in the job description

  • Prerequisite for an appropriate class of driver's licence and a clean driving record

❏ Selection:

  • Reference checks

  • Driving record check

  • Clarifying driving tasks in an interview

  • Determining candidates' attitudes toward safety

  • Identifying candidates' driving limitations

  • Assessment of:

    - Driving skills, knowledge and attitude

    - Mechanical skills, if appropriate

❏ Medical examination:

- Assessment of fitness to drive

- Vision exam

❏ Induction

- Explanations of:

    - Road safety policies and procedures

    - Driving-related responsibilities

    - Penalties and incentives

- Vehicle familiarization

- Signature on safe driving contract

Training

A comprehensive ORS training program includes:

❏ Driver training for those who drive on the job

❏ Theory

❏ Scenarios

❏ Awareness training

❏ In-vehicle training (one-on-one)

❏ Group discussions

❏ Informal learning:

- Toolbox talks

- Video presentations

- Meetings

Mentoring and support

The ORS program includes a mentoring and support system that couples experienced drivers with less experienced drivers.

Emergency procedures

❏ Drivers are provided with instruction on procedures for emergency situations and crashes

❏ Vehicles are equipped with emergency equipment, including:
- First aid kit
- Flashlight
- Fire extinguisher
- Pylons
- Flares

❏ Vehicles are equipped with a crash pack, including:
- Form for recording basic crash information:
  - Crash details
  - Police information
  - Other vehicles, drivers
  - Witnesses
  - Description and sketch of incident
- Copy for other driver(s)
- Disposable camera
- Incident report form
- Pen
- Flashlight

Incident reporting

Drivers are required to report all:

❏ Crashes

❏ Incidents

❏ Damage

❏ Near misses

Incident follow-up and investigation

The policy and procedure for the investigation and follow-up on ORS incidents includes:

❏ Investigation regarding cause(s) of incident

❏ Corrective measures to prevent a similar incident

❏ Assessment of liability issues

Monitoring drivers' performance

❏ Drivers' performance is reviewed on a regular basis

❏ Sufficient discussion sessions are held with drivers, supervisors and managers to ensure safety (particularly for high-risk drivers)

Recognition program

Drivers are motivated by recognizing significant achievements.

Corrective action

Corrective action is appropriate to the unsafe behaviour and escalates with recurring issues. This includes:

❏ Taking appropriate corrective actions, including:

- Verbal counselling
- Remedial education/training
- Probation from driving duties
- Suspension
- Disciplinary hearing
- Termination

❏ Maintaining records of corrective action in the employee's personnel file

Contractor and site visitor policies

The organization has policies for contractors and site visitors that include:

❏ On-site travel and loading/unloading

❏ Communication of these policies and procedures to:

- Employees
- Contractors and site visitors

❏ Reciprocal agreements with other organizations regarding loading/unloading

4.3   Journeys

The organization's journey-related strategies to reduce employees' exposure include:

❏ Reducing driving through the use of alternatives

- Working at home
- Virtual meetings
- Remote computer access
- Alternative modes of transportation

❏ Planning routes that minimize exposure to:

- Heavy traffic conditions
- Poor road conditions
- Complex road infrastructure

❏ Planning journeys that minimize stress and fatigue

❏ Developing policies that limit exposure to risk

5.0 Plan for Action

ORS action plans are developed using a structured process. Action plans include:

❏ Intended outcome of strategies

❏ Steps required to develop and implement strategies

❏ Responsibility for completing each step of the strategies

❏ Outputs and target dates for completion of each step

❏ Costs and benefits

❏ Evaluation of strategies

For more information on implementing occupational road safety preferred practices look for these five steps at RoadSafetyAtWork.ca.

❏ **Step 1: Get Management Commitment**

❏ **Step 2: Do a Status Review**

❏ **Step 3: Identify Risks and Hazards**

❏ **Step 4: Develop Strategies**

❏ **Step 5: Plan for Action**

International preferred practices, upon which BC's preferred practices are based, can also be found in Resources at RoadSafetyAtWork.ca.