

Safety

Safety is a basic business value of ODOT. Each supervisor must ensure that:

- Each employee is properly trained in, and uses safe work practices for, each task they perform.
- Proper safety equipment and apparel are available and are used, including required Personal Protective Equipment (PPE) and work in confined spaces or trenches, etc.
- Traffic control methods and devices for work zones or crash or incident response are proper and appropriate for the situation.

The Oregon Occupational Safety and Health Administration (OR-OSHA) defines the following seven elements of a good safety program, that are included in ODOT's Safety and Health Program:

1. Management Commitment.
2. Labor and Management Accountability.
3. Employee Involvement.
4. Hazard Identification and Control.
5. Incident/Crash Investigation.
6. Worker Training.
7. Periodic Plan Evaluation.

OR-OSHA develops and administers employer safety codes. These codes take precedence over any administrative rules of ODOT, unless ODOT has adopted more stringent rules.

The ODOT Office of Employee Safety administers ODOT's Employee Safety and Health Program. Each Region employs a Safety and Health Manager to help administer the program within the Region.

Each Region Manager, District Manager, Transportation Maintenance Manager, and other appropriate manager is responsible to assure that applicable elements of ODOT's Employee Safety and Health Program are accomplished and in use.

ODOT's Safety and Health Program

The ODOT *Safety and Health Manual* defines the standards, programs, and advisories included in the ODOT Safety and Health Program, as well as guidance in safe operating practices and procedures.

Elements of the ODOT Safety and Health Program include:

1. Safety and Health Education. The Region Safety and Health Manager will provide safety training when requested, needed, or required. Each manager, supervisor, or appropriate lead person will provide general training on a day-to-day basis and at crew safety meetings. For the Maintenance program, the Transportation Maintenance Manager must assure that:
 - Crew safety meetings are held no less frequently than monthly.

- All crew members and other appropriate persons attend, unless acceptably excused.
 - Discussion items and the names of persons present are recorded for each meeting.
2. First Aid/CPR and Bloodborne Pathogens. As specified in the ODOT *Safety and Health Manual*, employees should be trained in these areas. Safety Standard STD96004 provides guidance on this training, availability and contents of first aid kits, and associated responsibilities.
 3. Employee Physical Testing. If an employee must have a commercial driver's license, the employee must maintain a valid medical certificate.
 4. Safety Acknowledgement and Awards. Each Region should develop and administer a safety acknowledgement program, as described in Safety Standard STD96024 of the ODOT *Safety and Health Manual*.
 5. Job Hazard Assessment. The District Manager should work with the Transportation Maintenance Manager to develop and update specific Job Hazard Assessments of each activity and specialized tasks as described in the ODOT *Safety and Health Manual* Safety Advisory ADV99002.
 6. Job Safety Inspection. The Transportation Maintenance Manager and the lead worker at the site should cursorily inspect work sites for safety and compliance with the job hazard assessment for that activity or task. The Region Safety and Health Manager will periodically audit work sites for safety, will report areas needing attention to the Transportation Maintenance Manager, and will report repeat or significant unsafe conditions to the District Manager and, if needed, to the Region Manager.
 7. Defensive Driver Education. As discussed in ODOT *Safety and Health Manual*, Safety Standard STD96020, each ODOT employee, that drives an ODOT vehicle, must receive training in defensive driving techniques every five years. An employee may be required to receive additional training.
 8. Crash Analysis. Each Region Safety and Health Manager maintains records of vehicle crashes and personal injuries. The Region Safety and Health Manager will use that information to identify trends and frequencies to help the District Manager and Transportation Maintenance Manager to reduce or prevent crashes.
 9. Job Applicant Screening. Before a prospective employee is hired and if driving will be a duty of that employee, the Region Safety and Health Manager may assist the District Manager or Transportation Maintenance Manager by screening the driving record of the prospective employee and determining the person's acceptability to operate ODOT vehicles.

10. Employee Assistance Program (EAP). ODOT maintains an EAP to help employees who may need assistance with personal or work related issues that may impact their ability to perform their duties. This includes assistance to deal with stress or grief that result from situations that an employee encounters at work, including crashes involving fatalities or serious injuries of the public or co-workers. Contact the Region Safety and Health Manager or consult the ODOT *Manager's Handbook* for information.
11. Critical Incident Stress Management (CISM) Program. ODOT has developed a CISM program to provide crisis intervention following critical incidents to an ODOT employee. The focus of the program is to minimize the harmful effects of crisis or emergency situations and is intended to complement the services of the EAP and is administered by ODOT's Safety and Health Manager. Contact the Region Safety and Health Manager or a CISM Team member for information.

Safety Committee

Safety Committees are addressed in the ODOT *Safety and Health Manual*, Safety Program PRO96004.

Each District has a District Safety Committee, whose members are representatives from each maintenance crew, a manager, and the Region Safety and Health Manager. The purposes of the District Safety Committee include:

- Review crash and incident investigations.
- Review results of work site investigations.
- Discuss safety concerns.
- Develop and recommend actions to improve safety.

The District Safety Committee will report its findings to the District Manager. It will also report significant concerns to the Region Manager.

Planning for Safety

Before a crew or members of a crew start an activity, the Transportation Maintenance Manager or lead worker and the involved employees, among other things, should:

- Perform a job hazard assessment to describe the work, identify safety concerns, and prudent safety precautions to be taken to ensure a safe work environment.
- Identify and implement safety processes or devices, including needed protective equipment or Personal Protective Equipment (PPE), to eliminate or minimize the concerns and risk.
- Identify needed traffic control methods and devices and assure that they are available for use when needed and used properly.
- Identify the location of, and the way to contact for assistance, the nearest emergency medical assistance and medical facility.

Before the activity actually starts and periodically during the activity, the employees should assure that:

- Needed devices are in use, including those for safety, traffic control, and other needs.
- New safety concerns do not develop or, if they do, appropriate safety measures are defined and implemented timely.
- Traffic control methods and devices are functioning properly and adequately or appropriate changes are made. If workers take a break such as for lunch, they should appropriately modify the traffic control, and remove inappropriate signing or situations, so that the traffic control reflects only the situation actually in place.

As appropriate at the end of an activity or a work shift, the employees should review the activity to identify other safety concerns or methods as well as improvements to the processes or procedures to improve efficiency and effectiveness on future work.

Vehicles

- **Vehicle Use.** The Department of Administrative Services rules and the ODOT *Safety and Health Manual*, Safety Standard STD96020, define expectations of vehicle use and safety. If an ODOT employee operates an ODOT vehicle, the employee must complete training in defensive driving at least once each 5 years, as discussed above.
- **Use of Rotobeams or Other Overhead Warning Lights.** For use of these devices, see discussion in the Work Zone Traffic Control section below and in the Snow and Ice Activity section of this Guide.
- **Vehicle Crashes.** Each vehicle contains a "Vehicle Incident Report - Packet 3" that includes information and forms needed if the vehicle is involved in a crash. Items in the packet are available on the Office of Employee Safety website on the ODOT Intranet. Among other things, the driver of the ODOT vehicle involved in the crash must:
 - Provide assistance at the crash site as appropriate.
 - Request other assistance through the Transportation Operations Center.
 - As appropriate and where possible, direct traffic to provide safe traffic flow and protect the crash area.
 - Exchange information with the driver(s) of the other vehicle(s) involved in the crash.
 - Report the crash to the driver's supervisor on the provided form.
 - Report the crash, or assure that it is reported, to the Driver and Motor Vehicle Services Division (DMV) within 72 hours of the crash, unless the crash does not require that report.

The appropriate manager must:

- Assure that injured employees get medical assistance as needed.
- Assure that the involved employees complete the appropriate forms in the Vehicle Incident Report - Packet 3.
- Investigate the crash, using the forms in the Vehicle Incident Report - Packet 3, and as needed by the District Safety Committee.

- Initiate repairs to the damaged vehicle as discussed in the *Fleet Guidelines Manual*.
- Take other action as appropriate, including submitting required or needed reports or investigation reports.

The District Manager should provide needed assistance and assure that the crash is properly reported and investigated.

Also refer to discussion in the Crashes, Injuries, and Damage to Property section of this Guide.

Injuries to Employees

Before starting any activity, the Transportation Maintenance Manager or lead worker should assure that the workers know the location of, and how to contact if needed, the nearest emergency medical assistance and medical facility.

If an employee is injured:

- Other employees should render first aid or other medical assistance as appropriate.
- If the injury requires medical treatment, other employees should secure emergency medical service, including transport to a hospital or other facility if needed.

Each ODOT supervisor, including the Transportation Maintenance Manager, has instruction packets that include instructions and forms to follow if an injury occurs. The packets are available on the Office of Employee Safety website or from the Region Safety and Health Manager and include:

- Employee Incident - Packet 1 for injuries where the employee did not need seek medical treatment from a doctor or hospital.
- Employee Injury/Illness - Packet 2 for injuries that require medical attention beyond first aid.

If the injury or an occupational illness requires medical attention or will cause the employee to lose work time, the employee must also report the injury or illness to the State Accident Insurance Fund (SAIF) as well as the supervisor. Refer to the SAIF Claims Management Program PRO96001 of the ODOT *Safety and Health Manual* for instructions and processes.

The Transportation Maintenance Manager must:

- Assure that each injured employee receives medical attention as needed.
- Assure that each injured employee completes the appropriate forms in the appropriate packet.
- Investigate the crash, using the forms in the appropriate packet, and as needed by the District Safety Committee.
- Take other action as appropriate, including submitting required or needed reports or investigation reports.

The District Manager should provide needed assistance and assure that the injury situation is properly reported and investigated.

Also refer to discussion in the Crashes, Injuries, and Damage to Property section of this Guide.

If an employee is fatally injured, refer to guidelines in the Fatalities in the Workplace document located in Annex R of the ODOT *Emergency Operations Plan*.

Additional Safety Guidelines

1. Hazard Communication. The Transportation Maintenance Manager (TMM) or lead worker must assure that employees are made aware of chemical or other hazardous materials in the workplace and receive training as appropriate. When a new chemical or hazardous material is introduced into the workplace, the employees must be informed by the TMM or lead worker of the Material Safety Data Sheet (MSDS), for the product, as well as information on safe handling, its use, the need for personal protective equipment, and disposal of the product.
2. Personal Protective Equipment (PPE). ODOT *Safety and Health Manual*, Safety Standard STD96015 defines guidelines for PPE. The Transportation Maintenance Manager and lead worker will conduct a hazard assessment for each work site. If a hazard cannot be eliminated through engineering or administrative controls, the Transportation Maintenance Manager must assure that affected employees have and use appropriate PPE.

The Respiratory Protection Program, PRO96010 in the ODOT *Safety and Health Manual*, requires that each employee, that works where there is potential exposure to harmful metals, organic vapors, and chemicals, must wear respiratory protection and be trained in safe work practices and appropriate controls.

If an employee may be exposed to loud noises (15 or more days at 85 or more decibels), the employee's hearing must be tested and the employee must be trained, as specified in the Hearing Conservation Program. An employee, who works in an area posted for high noise or where equipment is confirmed to exceed the exposure limit, must wear appropriate PPE for hearing protection. Contact the Region Safety and Health Manager to arrange for the ODOT Industrial Hygienist to measure noise levels of equipment or work places.

3. Confined Space. Confined space includes work in tanks, sewers, blocked drain pipes, culverts, enclosed parts of bridges, etc. An employee must be trained in confined space safety and must be informed of the associated hazards before the employee may enter the confined space. Refer to the Confined Space Program, PRO96003 in the ODOT *Safety and Health Manual*.

4. **Blasting Operations.** In an emergency, ODOT may need to perform blasting or similar operations. An example would be to split a large rock, that has fallen onto the roadway, into smaller pieces in order to clear the roadway for traffic.

Blasting and similar or related work, such as road widening, rock falls and related scaling work, and construction activities should generally be performed by contract forces. If ODOT personnel perform blasting work, use the following guidelines:

- The ODOT personnel must:
 - Be competent and trained in blasting and explosives. Coordinate training and refresher courses, with approval of the District Manager, through the Field Services Program Manager in the Office of Maintenance.
 - Be licensed and certified by the State Fire Marshal. ODOT will pay the fees involved.
 - Comply with applicable laws and regulations on the storage, transportation, and use of explosives and blasting agents. Those include 29 CFR 1910.109, ORS 480.200 to ORS 480.275, OAR 437-002-0100 and OAR 437-002-0109.
- Wherever possible, use stable multi-component compounds, instead of dynamite or similar material, if explosive material is needed.
- Store explosive materials and compounds for blasting only in enclosures suitable for that use. Generally, those materials and compounds, if owned by ODOT, should not be stored in private facilities.

Whenever possible, use non-explosive techniques, such as non-explosive expansive compounds or equipment-mounted hydraulic breakers, for rock splitting or similar work. This work does not require licensing and certification through the State Fire Marshal.

5. **Employees Working Alone.** When an employee must work alone, the supervisor should assess the hazards and associated risks of the work and develop a communication plan to periodically assure the safety of the employee. The communications plan should identify the means of communication, employees involved, intervals for contact, emergency procedures, and other pertinent issues. The ODOT *Safety and Health Manual*, Safety Standard STD96010 provides guidance.
6. **Fire Protection.** The TMM or lead worker in coordination with Facilities Management Section of the Support Services Branch must provide fire protection and post fire safety rules for buildings, vehicles, and workplaces as discussed in the Safety Standards STD 96005 and STD 96008 of the ODOT *Safety and Health Manual*.
7. **Medical Assistance.** If an ODOT facility or location of an ODOT work crew cannot receive emergency medical services within a reasonable time, a person trained in First Aid/CPR must be at the facility or location. The Transportation Maintenance Manager and involved employees should also have defined a plan to provide emergency medical services if needed.

Employees are not required to render aid or to perform first aid or CPR to coworkers or the public.

8. Underground Work. To control exposure or risk of serious injury for an ODOT employee working in a mined tunnel, culvert, or rigid form an Underground Work Permit is necessary. Refer to the Underground Work Permit Standard, STD99002, in the ODOT *Safety and Health Manual*.

Work Zone Traffic Control

Whenever ODOT employees must perform operations on or adjacent to a roadway, the employees must define, implement, and maintain proper and adequate traffic control methods and devices and modify or remove the methods and devices when they are no longer appropriate or needed.

The ODOT handbook, *Traffic Control on State Highways for Short Term Work Zones*, describes traffic control methods, devices, and recommended enhancements for typical maintenance work situations. All traffic control methods and devices must conform to the requirements of this handbook, unless conditions dictate that some modification must be made.

Each District Manager and Transportation Maintenance Manager should develop a listing of temporary signs, barricades, and other devices, that may be needed to provide traffic control, and should maintain an adequate supply of those devices. The listing should include devices for use on normal maintenance activities, as well as devices identified under the *Emergency Operations Plan* as needed for reasonably anticipated emergency situations.

Employees should use due care in handling, use, and storage of traffic control devices to prevent or minimize damage.

The Transportation Maintenance Manager, or other designated employees, should review the condition of traffic control devices according to the American Traffic Safety Services Association (ATSSA) publication *Quality Standards For Work Zone Traffic Control Devices*. Replace, or otherwise do not use, any device that is in “marginal” or “unacceptable” condition as defined in that publication.

Many ODOT vehicles are equipped with rotobeams or other overhead warning lights. Use those devices under the following general guidelines:

- For snow and ice maintenance activities, see discussion in the Snow and Ice Activity section of this Guide.
- When shown in the *Traffic Control on State Highways for Short Term Work Zones*, use these devices and other devices shown in that publication.
- For other situations, a driver should use these devices only if the ODOT vehicle must travel at a speed less than the normal speed for that section of roadway or if the use is to warn of obstruction or danger ahead.

Use of these devices at other unneeded times can de-sensitize drivers to the warning devices and make the devices less effective. A vehicle may only be equipped with emergency warning lights (designated as an emergency vehicle) only if the Transportation Safety Section has approved a request from the Region Manager.

Refer to *Fleet Guidelines Manual* Section 2.210 for appropriate lighting for incident response vehicles.