

Working on the Roads with High-Visibility Apparel

GENERAL DISCUSSION

DPW workers are at risk of fatal and serious nonfatal injury when working in the vicinity of passing motorists, construction vehicles, and equipment. Each year, more than 100 workers are killed and over 20,000 are injured in the highway and street construction industry. Vehicles and equipment operating in and around the work zone are involved in over half of the worker fatalities in this industry.

Workers in highway work zones are exposed to risk of injury from the movement of construction vehicles and equipment within the work zones, as well as from passing motor vehicle traffic. Data from the Census of Fatal Occupational Injuries (CFOI) indicate that of the 841 work-related fatalities in the U.S. highway construction industry between 1992 and 1998, 465 (55%) were vehicle- or equipment-related incidents that occurred in a work zone.

Department of Public works (DPW) workers routinely work in proximity to construction vehicles and motor vehicle traffic. Flaggers and other workers on foot are exposed to the risk of being struck by traffic vehicles or construction equipment if they are not visible to motorists or equipment operators. Workers who operate construction vehicles or equipment risk injury due to overturn, collision, or being caught in running equipment. Highway workers, regardless of their assigned task, work in conditions of low lighting, low visibility, and inclement weather, and may work in congested areas with exposure to high traffic volume and speeds.

Injury Prevention Measures

High-visibility apparel

- Require all workers on foot to wear high-visibility safety apparel.
- Inspect high-visibility clothing regularly to ensure that color has not faded and that retroreflective properties have not been lost.
- So that workers do not blend into the background, consider using seasonal variations in landscape and foliage when choosing colors for worker apparel.
- Consider using fluorescent garments with retroreflective material when working under poor lighting conditions.
- Consider increasing visibility by using high-visibility arm bands and hats, and vests with strobes.
- Require fluorescent and retroreflective materials on head gear and on flaggers' gloves.

Developing internal traffic control plans

A temporary traffic control plan (TCP) describes how a specific work zone is to be set up to ensure the safety of the motoring public traveling through the work zone; however, construction equipment and vehicles within the work space are not addressed by TCPs .

An internal traffic control plan (ITCP) is a tool that DPW work crews can use to coordinate the flow of construction vehicles, equipment, and workers operating in close proximity within the activity area, so that the safety of workers can be ensured.

- Develop an internal traffic control plan (ITCP) once the temporary traffic control plan has been established. As the ITCP is developed, consider how the work space fits within the overall work zone and make sure that the ITCP is placed in the context of a temporary traffic control plan.
- Develop internal traffic control plans for all medium, large, and multi-contractor jobs. For small recurrent operations such as filling potholes, routine maintenance, and mowing, a checklist could be used in place of a complete ITCP.

Implementing internal traffic control plans

- Train workers in the implementation of the ITCP for each project.
- Place a trained ITCP coordinator at each job site. By being at the job site, the coordinator is able to respond immediately to hazardous situations. The employer should authorize the coordinator to make adaptive changes and/or halt operations as needed to ensure worker safety.
- Evaluate the effectiveness of the ITCP throughout the project, noting changes required as the project evolves. Retain schematic drawings and other documents in the "job file" for use in developing future ITCPs.
- At entrances to the activity area, distribute site-specific safety materials, including a copy of the ITCP and safety guidelines for workers on foot, to all drivers and visitors coming into the activity area. Other means of communicating this information include toolbox safety meetings, faxing the ITCP to other employers who will be on site, and distributing the ITCP to truck drivers at the loading facility.

Training Program

- Implement a performance-based training program that evaluates trainees' core and specialized knowledge and demonstrated ability to perform the tasks for which they were trained.

- Create an industry-wide campaign to promote training and to publicize available training programs.
- Train all workers, equipment operators and supervisors to recognize and avoid the hazards of working on foot and around equipment.
- Train DPW workers in hazards and adaptations for work at night and in other low-visibility conditions.
- Hold daily toolbox meetings at the job site to discuss and report hazards and close-calls, and to discuss safety considerations for performing the day's tasks.
- Train DPW workers on the specifics of the ITCP for each new construction project. Review ITCP with workers whenever it is modified.

GENERAL SAFETY REVIEW

This is a time to review all safety concerns, not just today's topic. Keep your notes on this page before, during and after the safety meeting.

Are you aware of any safety hazards from any other crews? Point out any hazards other crews are creating that this crew should know about. Tell the crew what you intend to do about those hazards.

Do we have any other safety business? Discuss any past issues or problems. Report any progress of investigations and action taken.

Have there been any accidents, near misses or complaints? Discuss any accidents, near misses, and complaints that have happened since the last safety meeting. Also recognize the safety contributions made by members of the crew.

Please remember, we want to hear from you about any health and safety issues that come up. If we don't know about problems, we can't take action to fix them.

ENDING THE MEETING

Circulate Sign-Off Form.

Assign one or more crew member(s) to help with next safety meeting.

Refer action items for follow-up.

Do you have any Safety Recommendations?

Do you have any Job Specific Topics you would like us to discuss?

Comments
