

Occupational Safety Needs More Visible Action

- Revised Guidelines Positive Step Toward Enhanced Safety -

Last year's revised Section 6 of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) is raising awareness of occupational safety issues and prompting changes designed to help protect those in high-risk occupations. Such occupations include road workers and first responders exposed to the low-visibility hazards of moving vehicular traffic. According to the Census of Fatal Occupational Injuries, struck-by-vehicle accidents accounted for 336 fatalities across all industries in 2003 (1). More than 40,000 injuries resulted from motor vehicle crashes in work zones. Road workers are eight times more likely to be injured than the average worker and twice as likely as other construction workers (2). Some of these accidents are linked to low visibility, according to a 2001 National Institute for Occupational Safety & Health study (3).

The problem is only growing worse. According to studies listed in an industry white paper produced by 3M, "A Safety Profile of Roadway Construction Workers," work-zone fatalities and injuries have been on the rise. This is reportedly due to an increased need to repair deteriorating roads; increased average roadway speeds; rapidly growing number of drivers over the age of 50; and, most specifically, a rapid increase in nighttime roadway construction. Further, statistics indicate that work zones have increased by 30 to 60 percent over the past five years. The average speed of traffic through highway work zones has exceeded 50 mph or higher in most locations."

In December of 2003, the Federal Highway Administration took a significant step in the right direction with the revision to Section 6 of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD). For the first time, this section focused on roadway workers and stated that these workers should not only work behind traffic safety devices such as cones, barrels and signs, but should also wear protective, high-visibility safety apparel compliant with ANSI/ISEA 107-2003: American National Standard for High-Visibility Safety Apparel (and equivalent revisions, such as the recently issued 2004 edition) while working on a federally funded highway.

"The revision to Section 6 of the MUTCD showed that decision makers recognize there is a problem and are making strides to help prevent future accidents and fatalities," said Gary Pearson, marketing manager for 3M Personal Safety Products. "But this is just one step. To truly help make the work environment safer for both workers and drivers, state officials need to consider adopting legislation such as Minnesota OSHA 5205 that says all workers exposed to moving vehicular traffic shall wear garments compliant with the ANSI/ISEA standard. A similar measure is also in effect in the state of Washington."

Protecting roadway workers not only can help prevent injuries or fatalities, but can also have financial ramifications. In 2002, the American Traffic Safety Services Association noted that if the public and private sector allocated annual expenditures of at least \$3 billion for a range of 32 highway safety improvements, including the outfitting of all roadway workers with high-visibility safety apparel, they could avoid 66 roadside fatalities and almost 5,000 roadside accidents per year. This measure could save taxpayers and the government approximately \$280,964 per accident or fatality each year. Based on the implementation of these safety improvements, the American Economics Group states that for every dollar spent on high-visibility safety apparel, \$5 of accident costs may be avoided (4).

Roadway workers are not the only ones at risk of being struck by roadway traffic or moving equipment. According to the Census of Fatal Occupational Injuries for 2003, 84 truck drivers; 21 security services workers; 13 law enforcement officers; nine electric, gas and sanitary service workers; seven building and grounds

maintenance; and five firefighters were struck and killed by vehicles under all causes while working on or near a roadway. In a recent "Report to Congress" prepared by the National Highway Traffic Safety Administration, the writers also establish a link between some struck-by-vehicle accidents and low visibility, and recommend that first responders and motorists outside their vehicles along a roadway wear high-visibility safety apparel (5). These numbers underscore the importance of occupational workers being visible on the job and the need for decision makers in public agencies and private industry to look hard at adopting comprehensive high-visibility requirements.

(1) Census of Fatal Occupational Injuries, Bureau of Labor Statistics, 2003

(2) General Estimates System (GES), National Highway Traffic Safety Administration as reported by Federal Highway Administration, 2003

(3) Building Safety Highway Work Zones: Measures to Prevent Worker Injuries from Vehicles and Equipment, National Institute for Occupational Safety and Health, 2001

(4) ATSSA's Roadway Safety Program: Economic Impact of \$3.0 billion Annual Safety Initiative, American Economics Group, 2002

(5) Report to Congress: Safety Countermeasures for Unintended Pedestrians and Law Enforcement Officers, National Highway Traffic Safety Administration, 2005

About 3M -- A Global, Diversified Technology Company

Every day, 3M people find new ways to make amazing things happen. Wherever they are, whatever they do, the company's customers know they can rely on 3M to help make their lives better. 3M's brands include Scotch, Post-it, Scotchgard, Thinsulate, Scotch-Brite, Filtrete, Command and Vikuiti. Serving customers in more than 200 countries around the world, the company's 67,000 people use their expertise, technologies and global strength to lead in major markets including consumer and office; display and graphics; electronics and telecommunications; safety, security and protection services; health care; industrial and transportation. For more information, including the latest product and technology news, visit www.3M.com.

3M, Scotch, Post-it, Scotchgard, Thinsulate, Scotch-Brite, Filtrete, Command and Vikuiti are trademarks of 3M.

3M, St. Paul
Colleen Harris, 651-733-1566
or
Cohn & Wolfe
Jason LaDuca, 212-798-9780
jason_laduca@cohnwolfe.com

<https://news.3m.com/2005-05-24-Occupational-Safety-Needs-More-Visible-Action>