



Sun Glare Awareness for Crossing Guards

Toolbox Talk Lesson Plan

Although glare can be dangerous year-round, it is an especially big problem in the fall of year, when several factors conspire against pedestrians and drivers during the worst traffic hours of the day: rush hours. The change from daylight-savings to standard time also impacts driving at sunset. Nationwide, glare is the official cause of only a fraction of fatal crashes across the country less than 0.3 % according to the National Highway Traffic Safety Administration. However, many investigation forms do not record sun glare, so severe underreporting is probable.

Glare is at its worst when the sun is low, toward the horizon. That typically occurs in the hour or so after sunrise and before sunset, which means glare is a problem from about 7:30-9:00 a.m. & from 5:00-6:30 p.m.

Make yourself Conspicuous - being seen or standing out, in traffic. Primary factors that affect conspicuity include selective perception and environment. Following are brief discussions of each factor, and information on ways to make pedestrians more conspicuous.

1. **Selective Perception:** Among the biggest enemies of pedestrians is the phenomenon of selective perception. People tend to see what they are looking for and to overlook things in which they have no interest. When most motorists drive, they usually search for the things that are most likely to damage their vehicle or cause them injury -- other motorist. Pedestrians can get lost in the background. They are not conspicuous!
2. **Environmental Factors:** Environmental factors can also affect the visibility of pedestrians and bicyclists to motorists. Rain, snow, smoke, fog, wind-driven precipitation, shadows and glare all reduce visual range and acuity. Man-made aspects of the environment are equally important. Dirty or cracked wind-shields not only reduce vision, but magnify the effects of glare.

Crossing guards must keep a watchful eye on traffic, their own safety, and the safety of the school children they protect. Their visibility to motorists is extremely important as roads become more congested with vehicles.

The glare-induced "blindness" is especially prevalent during the winter months, due to the lower elevation of the sun in the sky and the extremely reflective qualities of snow and ice on the ground. Because snow is so reflective, there is a risk of up to 85 percent of the UV rays of the sun being transmitted upward. Age-related macular degeneration is the major cause of reduced vision in the US for people over age 55. Scientists speculate that chronic UV exposure may contribute to aging in the retina

The key to pedestrian safety in glare situations is to make yourself more visible to the drivers.

1. Be sure to wear retro-reflective clothing and equipment, and provide light demarcated walkways)
2. Avoid of visual screens; and
3. Provide programs for training and education.

When the sun is at your back, assume that cars moving towards you cannot see you at all.

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