

SHIFT BRIEFING

CROSSING GUARDS - SUN GLARE AWARENESS BEST PRACTICES

Although glare can be dangerous year-round, it is an especially big problem in the fall, 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 an hour or so after sunrise and before sunset, which means glare is most problematic from about 7:30-9:00 AM & 5:00-6:30 PM.

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 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 motorists. 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 windshields 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 crossing guard 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. Be aware of and avoid visual screens/obstructions to oncoming motorists.
- 3. Be aware that long shadows in the street mean the sun is at your back and can blind traffic.
- 4. Provide programs for training and education.

ASK: Which Guard Posts Have Streets that Run East and West?

These are prime candidates for early morning and late afternoon blinding sunlight at the backs of guards and in the face of drivers.