

Consider different eye protection options for your workplace



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In a number of industries, one of the most important safety measures an employer must adhere to is taking proper precautions with eye safety. OSHA estimates that over three million U.S. workers are at risk for job-related eye injuries and more than 2,000 are actually injured every business day. Of these injuries, 10 to 20 percent result in temporary or permanent vision loss. In fact, each year, between \$300 and \$500 million is spent in the U.S. as a result of eye injuries. The good news is that approximately 90 percent of these injuries are preventable with proper eye protection. OSHA requires employers to make sure that all employees use appropriate eye protection. It is a necessary and worthwhile investment.

When choosing the right eyewear for employees, it is important to consider the following:

- Common eye injury risks in the industry or workplace
- The various eye protection options for the specific work environment
- Options for ensuring all employees are provided with the correct fit and adjustment for their safety lenses

Recognizing common symptoms

Because eye injuries can often lead to permanent damage, it is critical for employers to know what these types of injuries look like and how to properly handle the situation if an accident occurs. According to the American Academy of Ophthalmology (AAO), there are telltale signs that can help employers recognize both minor and severe eye injuries in the workplace. Common eye injury symptoms are redness, glassiness or swelling around the eye from flying object impact, chemical or liquid splash, or dust or debris particles. Less commonly known symptoms to look for include one eye not moving as well as the other, an atypical pupil shape or size, or if the person has something in the eye or under the lid that cannot be manually removed.

Choosing the right protection

After assessing the eye risks of the work environment, it's time to choose the correct protective eyewear to fit these needs. When it comes to the appropriate eye protection for a worksite, AAO recommends the following: "If your work area has particles, flying objects or dust, safety glasses with side protection such as shields alongside either lens is an added safety bonus. If you are working with chemicals, goggles are absolutely a must and, if you are working near hazardous radiation (welding, lasers or fiber optics), you must use special-purpose safety glasses, goggles, face shields or helmets specifically designed for this type of work."

An assortment of lenses is available to fit the needs of many different industries and job applications. Some of the most popular lenses on the market today include clear or gray options and indoor/outdoor clear mirror lenses. Clear lenses provide excellent optics for general applications and are popular because they allow the majority of light to pass through without distorting the visible color spectrum. Gray or mirror silver/blue lenses do the opposite and reduce the amount of light that passes through the lens. Similar to a polarized lens, they are commonly used in construction and outdoor worksites where sunlight and glare could cause eyestrain. Falling in the range between these two lenses are indoor/outdoor clear mirror lenses, which are best for workers such as forklift drivers who are most likely to be both inside and outside.

Other lenses to consider for the workplace and employees are amber-tinted lenses. These lenses allow for 80 percent of light to be transmitted and are designed for lowlight situations. The amber lens color blocks virtually all blue light to reduce haze and glare. Blue light makes it very difficult to focus and minimizes the contrast on cloudy days, in the fog and at dusk. Amber lenses reduce the haze that typically

accompanies blue light, providing the feeling of a clearer and brighter sight in daytime situations. In situations where welding or infrared radiation are of concern, filter shade lenses and specific welding filter shades provide optimum protection.

Finding the right fit

Once the best lenses have been selected for the job, it's important to ensure the eye protection has the right fit for each employee. Eyewear that fits correctly is essential for comfort, performance and most importantly, protection. If safety glasses do not fit securely or there are large gaps in coverage, there is a risk of serious eye injury from flying debris or particles. To ensure eyewear fits properly, some styles offer adjustment features or are available in multiple sizes to accommodate a variety of facial shapes for a customized fit. Don't forget that those who wear prescription eyewear on a daily basis will need lenses that comply with their vision needs.

In addition to OSHA requirements, ANSI is the recognized entity that sets forth manufacturing standards in the U.S. The current ANSI Z87 standard requires that safety glasses and goggles provide:

- adequate protection from the hazards for which they were designed;
- reasonable comfort;
- a secure fit without interfering with movement or vision;
- the ability to easily be cleaned and disinfected;
- durability, and
- the ability to fit over or incorporate prescription eyewear.

Visit ANSI online at www.ansi.org.

From construction workers and forklift drivers to welders and lab employees, the risk of eye injury is prevalent across many industries. Following proper eye safety protection protocols in the workplace is of extreme importance -- it can reduce the risk of these injuries occurring and could save someone's vision. With proper research and consideration for the needs of employees, a solution can be found to prevent injuries and accidents.

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