Eye Safety Questions and Answers

Q. How many eye injuries occur in industry in the United States?
A. Over 100,000 workers suffer disabling eye injuries each year. Eye injuries cost industry over 450,000,000 annually, with the average cost per eye injury exceeding $4,000.

Q. What causes eye injuries?
A. A recent survey completed by the United States Bureau of Labor Statistics found that 3 out of 5 workers who received an eye injury wore no eye protection, and most of the rest wore the wrong kind of eye protection for the hazard. It is estimated that over 90% of all eye injuries could be prevented through the use of appropriate eye protection.

Q. Aren’t all eyeglasses required to be impact-resistant?
A. Yes, but industrial-quality safety glasses – both lenses and frames – must meet much stricter requirements than regular streetwear glasses and sunglasses.

Q. Should safety glasses be worn only for hazardous jobs?
A. No. Many accidents occur away from the work area. To be fully protected, appropriate eye protection should be worn throughout all areas of the workplace.

Q. How can one tell if eyeglasses are “safety glasses”?
A. Safety glasses have a monogram on each lens, and a “Z87” on the frame front and temples, indicating that they meet the American National Standards Institute’s (ANSI) Practice for Occupational and Educational Eye and Face Protection, Z87.

Q. How can safety glasses be kept from slipping and fogging?
A. Either headbands or cable-comfort temples that wrap around the ear will keep safety glasses from slipping. Various products for applying to the lenses to prevent fogging are readily available.

Q. Should safety glasses with side shields be worn?
A. Yes. Eye injuries often occur to workers who wear safety glasses without side shields. Full, orbital-fitting plastic or wire mesh sideshields should be utilized.

Q. Can visual corrections be ground into industrial safety glasses?
A. Yes. Protective lenses can either incorporate vision corrections, or be plano (non-corrective).
Q. Does it matter if safety glasses have plastic or glass lenses?
   A. While plastic is generally stronger, both offer good impact resistance. Plastic lenses are lighter in weight, more resistant to welding pattern, and less likely to fog. Glass lenses are more resistant to scratching and to chemicals than plastic lenses.

Q. Should scratched or pitted lenses be replaced?
   A. Yes. Scratches and pits greatly reduce the lenses’ impact resistance.

Q. Should photochromic (phototropic) lenses be worn indoors?
   A. No, according to the ANSI Z87 Standard. However, these lenses can be worn for outdoor work, if there is no ionization radiation hazard.

Q. Can contact lenses be worn at work?
   A. In many cases, yes, depending upon company policy. However, in some situations, such as working with chemicals, or in dusty atmospheres, contact lens use should be restricted. In all cases, safety eyewear should be worn by anyone wearing contact lenses, since contacts provide no eye protection, in the industrial sense.

Q. Are all safety goggles the same?
   A. No. There are two basic types of goggles. One type, used for protection against small particles, is perforated throughout with small holes for ventilation. The other type, used for protection against chemicals, has an indirect vent system.

Q. Is “double” eye protection ever needed?
   A. Yes. A face shield or goggles over safety glasses should be used to protect against heavy impacts or chemicals splash. Eye protection should also be worn under welding helmets for use when chipping slag or inspecting work.

Q. What should be done if chemicals are splashed into the eyes?
   A. The eyes should be flooded with water immediately. Flushing should continue for at least 15 minutes. Medical assistance should then be obtained.

Q. What activities around the home present eye hazards?
   A. Eye protection should be worn when using hand and power tools, performing home maintenance and repair, moving the lawn, applying fertilizers and other chemicals, using cleaning agents, and working on cars.

Q. What should be done with a speck or other foreign body in the eye?
   A. Don’t rub the eye. Try to flush it out by lifting the upper eyelid outward and pulling it down over the lower eyelashes. If this doesn’t work, seek medical assistance immediately.