

[The Last Word on Contacts](#)

For years, wearing contact lenses has been discouraged in areas where hazardous chemicals are used. OSHA even stated in the non-mandatory appendix to the Laboratory Standard, "Avoid use of contact lenses in the laboratory unless necessary; if they are used, inform supervisor so special precautions can be taken."

Those precautions generally included special vapor proof goggles. Two widely misreported incidents fueled these concerns about the hazards of contact lenses and lent credibility to unsubstantiated beliefs. The first was a 1967 arc flash that supposedly fused a worker's contact lenses to his eyes, and when the lenses were removed, the cornea peeled off and he was blinded. In reality, the worker wore his lenses too long and suffered a corneal ulceration, which healed completely in a couple of days. He had been exposed to an electrical arc the same day without incident, hence the source of the rumor.

The second incident involved an industrial ophthalmologist who, while proposing a restrictive contact lens use policy, used a chemical eye injury incident to support his position. The incident involved a 50 percent caustic splash to an engineer's face while wearing contact lenses with goggles; although the engineer suffered eye injury, there was no documentation of how the contacts contributed to the injury, if at all, or what type of goggles were involved.

Current research studies have concluded that wearing contacts in a chemical environment or other environments does not increase the risk of injury. After 40 years of contact lens use, there is no well-documented information that wearing contacts increases the risk of injury over that of non-wearers and wearers of spectacles, whether one is talking about foreign bodies, or chemicals, or other eye hazard sources, such as UV and IR. In each instance, none documented a greater risk of injury to the contact lens wearer over the non-wearer--and in most, a protective effect was noted.

What was found was information that contradicted previous fears. One fear was that foreign bodies, normally washed away with tears, could become trapped under the lens and thereby abrade the cornea. However, studies have led to a theory that what actually happens is that the normal adhesion force of the lens to the eye surface prevents a foreign body from entering the space under it, and particles are easily removed by normal tearing, blinking, and cleaning.

Another fear was that chemicals could absorb through the lens, resulting in subsequent injury to the cornea. Although studies have shown that some chemicals can be absorbed into certain soft lenses, the studies have not demonstrated that the chemicals reach the other side and injure the cornea.

Therefore, OSHA has changed its stance and now states, "OSHA believes that contact lenses do not pose additional hazards to the wearer and additional regulation is unnecessary." In response, the EHSO has modified the OUHSC Laboratory Safety Manual and removed recommendations against wearing contacts in laboratories and requirements for special goggle use when wearing contacts. Employees with contacts should wear whatever eye protection that would normally be worn by workers not wearing contact lenses.