



Safety Watch: Elders show importance of eye protection

By Stephanie Leonard

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Cartoon courtesy Rick Friday © 2018

My grandpa Abe had a milky-blue eye.

It fascinated me as a kid because it had no pupil. You couldn't help but notice.

As a young farmer in his 30s, he was blinded in one eye after two injuries in the 1940s.

The first happened when he was on his JI Case SC tractor in the grove, getting firewood. A stick got caught in the engaged belt pulley on the side of the tractor and flew up, striking him in the left eye. It left him with impaired vison.



Abe Leonard and farm dog Blue in 1985. Photo courtesy Doug Leonard

The second injury was dealt by a big Brown Swiss milk cow. Grandpa had earlier — and fortunately — cut off the tail switch, a way to manage manure and flies. While he was milking her, she swung her heavy tail like a club, landing a blow to the eye.

"They called it a torn retina," Dad explained of the first injury. "The tail finished it off."

Back then, there wasn't too much that could be done. He was lucky to save the eye, but his torn retina detached with the second blow. His eye became opaque. With one blind eye, he was left with no depth perception and diminished peripheral vision.

From anyone's observation, he adapted to the change and continued farming successfully for 50 years near Holstein, Iowa. He even took up golf in his later years. Yet it's hard to say how many other close calls and injuries on the farm (and yes, there were several) were due, in part, to his loss of depth perception.

We knew it affected his driving.

"It was jumpy for me to ride with him, because he couldn't tell how close he was to somebody in front of him," Dad recalled. "Back when he smoked, he'd light a match and be holding it 2 inches away from the end of his cigar."

If he would have had the eye protection that's available today, Dad concluded, his injuries would have been less severe, and he probably would have retained some vision.

By the numbers

Safety experts, eye physicians and injury data underscore that message:

- The National Institute for Occupational Safety and Health reports that about 2,000 job-related eye injuries requiring medical treatment occur to U.S. workers daily. The two main reasons: not wearing eye protection and wearing the wrong protection for the job.
- A Bureau of Labor Statistics survey indicated three of five workers who experienced eye injuries weren't wearing eye protection at the time of the injury.
- A survey of all eye injuries conducted by the American Academy of Ophthalmology (AAO) and the American Society of Ocular Trauma reports 45 percent of eye injuries occur at home (often involving home maintenance, cleaning or cooking) or in recreational activities. In nearly 80 percent of cases, people weren't wearing eye protection.

The good news, AAO says, is that wearing the proper protective eyewear can prevent or lessen the severity of 90 percent of eye injuries. Better yet, remove the hazard or use machine guarding and protective screens, if possible.

Selection

Choosing the correct eye protection hinges on identifying hazards. These can include projectiles (flying or falling objects, fragments, chips); dust; chemicals (splashes, vapors, mists); and radiation (welding, cutting and brazing; sunlight; and blue UV light from screens of computers, TVs and handheld devices).

The categories of eyewear include, in increasing level of protection:

- safety glasses with side protection;
- goggles with direct venting (for large particles); indirect venting (for dusts and splashes), or non-venting (for chemical vapors and gases, including anhydrous ammonia);
- face shields worn over glasses or goggles;
- full face respirators; and
- special protection for optical radiation, with face protection and filter lenses denoted with minimum shade numbers determined by welding, cutting or brazing operation.

Not all hazards are as obvious as projectiles, welding or anhydrous. Chronic, unprotected exposure to UV radiation from sunlight increases risk of developing cataracts and age-related macular degeneration. Wearing sunglasses with UVA and UVB protection, along with wide-brimmed hats, helps.

The keys for protection are straightforward:

- Have the proper eye protection on hand for the job, when and where you need it, so you can use it routinely. You can't go wrong having several pair of safety glasses and goggles available in the shop, house and in your vehicles.
- Look for the ANSI Z87 mark on the lens or frame that shows they meet minimum

safety standards.

• Replace them when they're damaged.

In contrast to my grandpa's era, there's now a wide selection of sizes, configurations and UV safety eyewear that make it easy to find gear that fits and is protective. Some even have reader (bifocal) function for close work.

The stick-in-the-eye story was recounted many times while we were kids, one of my grandpa and grandma's many real-life lessons about how you could get hurt on the farm. Back then, they didn't say "freak accident" like we hear or read often today — a phrase attributed to unexpected (but nearly always preventable) injuries.

While my brother always wondered how Grandpa could even hit a golf ball — with just right eye, bifocals and no depth perception — we never heard him complain about it.

But I think he would advise anyone that protecting your eyes is essential to maintain your vision and quality of life. You're never too young or too old to start.

More information on selecting proper eye protection is available from:

- American Optometric Association: http://bit.ly/2Ia2l6N
- OSHA's Eye and Face Protection eTOOL: http://bit.ly/2D8cJrU
- Local or online safety and construction equipment dealers.

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