

NAVAL SAFETY COMMAND SAFETY A WARENESS DISPATCH



Eye Injuries

"Last time I trusted someone, I lost an eye." —Nick Fury

Serious eye injuries can – *literally* – change the way a person *views* the world around them, which can take a huge toll on both their mental well-being and physical health. In the last four years (fiscal year 2020-2024), mishap data shows over 1,200 incidents involving an eye-related injury. Not all of them were serious, but luck was the only difference in many cases between a minor event and a horrible mishap. A quick glance shows a yearly increase in reports from FY20-23, with FY24 about the same as FY23. These numbers indicate that the issue is still a problem and highlight the importance of proper PPE in helping to prevent eye injuries. The following examples serve as 'eye-opening' reminders for eye safety. Please read and heed.



- "Eye" Didn't See That Coming. A group of Marines were training on mechanical breaching of barbed wire obstacles. They received a safety brief on barbed wire handling procedures and personal protective equipment (PPE) which included directions to wear eye protection. The need to wear PPE was reinforced again before the training began, and three safety officers were put in place to supervise and observe the group. Training commenced and while cutting the barbed wire, a Marine was struck in the eye by the recoiling wire. He wasn't wearing eye protection even though he had eye protection with him at the time. He was hospitalized and underwent surgery to repair his punctured eye. —Eyepro only works if you use it. Having it with you isn't the same thing. You don't just bring your Kevlar with you into combat; you put it on. The injured Marine was told to wear eyepro multiple times before the training, had the eyepro with him, and yet didn't wear it. Equally alarming is that per the mishap report, a safety officer assigned to observe the training (and enforce published rules) was in teaching mode with an adjacent group and not directly observing this inexperienced Marine. Please follow the rules (they're there for a reason) and, if you're the supervisor/observer, focus on assigned responsibilities.
- <u>Safety vs. Speed: A Fire Drill with Sharp Lessons.</u> During a timed fire drill, a Sailor attempted to gain access to a suction hose that was secured with a zip tie. In the heat of the moment, she chose to cut it using a personal pocketknife. As she cut through the zip tie (*cutting toward herself, BTW; a separate problem*), the momentum carried the knife into her eye. The crew immediately rendered first aid, she was taken to the hospital and underwent surgery. Fortunately, after a few days in the hospital and a week of rest, it looks like she'll be seeing her way back to work. —A knife is a terrible choice of tool to cut a zip tie, and you should always cut away from your body, never toward yourself. The report noted that the crew discussed the importance of safety before the drill AND there were wire cutters (a.k.a. diagonal or side cutters) available. The Sailor was more focused on speed to pass the drill than personal safety. Learning point: If you stab yourself in the eye from going too fast, you don't pass. "Slow is smooth, and smooth is fast." Don't let the 'heat of the moment' burn you.
- Momentum's Consequence. A Marine was removing the turbocharger from a tactical vehicle with the help of an assistant. He was using a screwdriver (angled toward himself) to pry off the exhaust hose from the turbo (an opportunity for a real-time Risk Management (RM) was missed here). The screwdriver slipped off the hose and the momentum sent the screwdriver into his eye. He was taken to the ER where he underwent emergency surgery to repair a ruptured eye globe. During the post-surgery follow-up, it was determined that the eye required removal not the ending anyone was hoping for. The mishap report noted the tech manual lacked adequate instruction for conducting the task and didn't specify the PPE required. Combine those shortfalls with the worker's inadequate risk assessment and decision to angle the screwdriver toward himself, and the process became a recipe for disaster. —It's hard to stop and think what 'could' happen while in the thick of it... but we must program ourselves to do a real-time risk assessment with every task (in plain English that means: When you're about to do something, teach yourself to think "What's gonna' happen if I do this?"). And if you're observing a co-worker about to do a potentially unsafe act, do the same "What's gonna' happen" thing and say

Eye Injuries

<u>something</u> and discuss other options. Just like with the knife example above, pry <u>away</u> from yourself and make sure you're not in a position of impact from the momentum of the tool you're using if it bounces or slips off.

- Eye Spy Trouble. Marine 1 (M1) and Marine 2 (M2) were in the barracks where M2 was playing with a water gel gun. For reference, water gel guns resemble paint ball guns but use smaller, water-filled projectiles, fire at a lower velocity, and are supposedly less dangerous. M2 pointed the gel gun at M1 in a joking manner and squeezed the trigger. M1 was struck in the eye by the projectile. An incident report was made, but there was no visit to medical. A few days later M1 informed his supervisor of vision issues with his injured eye. He was taken to the ER, examined, then sent to an eye specialist who found corneal damage which led to a permanent partial disability. —M2 didn't see the possible consequence of shooting a gel gun in the direction of a person without eye protection. Remember the: "and what's gonna' happen if I do this?" question from the screwdriver example? RM applies to both on- and off-duty activities. Even when you're just playing around, learn to think for a second about what could happen.
- <u>Unacceptable Spectacles</u>. A maintainer was safety wiring a lock pin actuator when his hand slipped. The safety wire went under his eyeglasses and contacted his eye (*ouch!*). The next day he woke with eye irritation, prompting a trip to the ER where his eye was flushed and treated, followed by two days SIQ. Per the report, eye protection should be worn at all times while performing safety wire evolutions. This maintainer was wearing eyeglasses but without proper eye protection. —*Regular glasses aren't safety glasses. Most prescription glasses don't meet the standards for protective eyewear. Prescription protective eyewear is typically obtained through the medical department. Bottom line, wear PPE as prescribed by the instructions governing your work. Protect your eyes properly, you only have two.*
- When Air Hoses Attack. While performing preservation work on a deck, a Sailor connected the low-pressure air hose to a sander *then* donned the necessary PPE (*wrong order*). After completing the sanding process, he removed his PPE and *then* disconnected the air hose (*again, wrong order*). During the disconnection, he lost control of the air hose, which promptly flew back and struck him in the eye. The injury led to blood in his eye and reduced vision, requiring a visit to medical. He was taken to the ER, diagnosed with two conjunctival lacerations, spent a day in the hospital followed by several weeks SIQ. —Always keep safety gear on from the start to the finish of a task—especially when working with pressurized equipment. Low-pressure doesn't mean risk-free, and as they say, hindsight is 20/20.

Key Takeaways

Protective eyewear isn't just for industrial settings—sports, home projects, and outdoor activities also pose risks. Risk management works the same for both on and off duty activities (*yes, we know we've already stated this, but it bears repeating*). By wearing your eyepro (*not just bringing it*), following task-specific safety guidelines, and using basic RM techniques, you can drastically reduce the likelihood (a.k.a. risk) of eye injuries and protect your vision for life.

- **1. Plan for the slip.** Never cut, pry, scrape, drill, saw, whittle, hammer, air-nail, carve, etc., toward your body. You don't want to be on the receiving end if the tool slips.
- 2. Wear the eyepro. Bringing your Kevlar to the fight isn't much good if you don't put it on.
- **3. Wear the <u>RIGHT</u> eyepro.** There is specialized protective eyewear for many tasks such as welding, chemicals, ballistics and others. Make sure you're protected based on the task you're doing and the authoritative instructions and procedures that cover it. The eye protection for specific situations depends upon the nature and extent of the hazard and personal vision needs. For some intermittent types of work, the right goggles can be worn over regular prescription glasses.
- **4. Wear the eyepro for the entire job.** Removing protective eyewear early (i.e., before cleaning up or disconnecting an air hose like in the example above) or putting it on late, is setting yourself up for an eye injury.

And remember, "Let's be careful out there."