Construction Safety – Summer Edition eBook

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ARMOR GUYS

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Contents

Bradley's Halo™ Eyewash Models Deliver The Best Protection

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Halo™ eye and eye/face wash arms users with the most effective emergency relief available, providing 20 percent better protection than any other eye/face wash. The Halo eyewash system offers a high-performance rinsing platform that provides rapid relief to an individual's eyes and/or face that have been injured by chemicals or particulate.

Bradley's exclusive eyewash and eye/face wash model is operated by activating an ergonomic, highly visible push handle. The proprietary design provides the most effective wash down coverage and spray pattern to remove contaminants.

Halo's safe, steady water flow under varying water supply conditions from 30–90 PSI (2.0-6.1 bar) is assured by integral flow control in the sprayhead assembly. It includes an integral 5.1 GPM (19.2 L) flow control, providing water at a safe velocity while maintaining its effectiveness.

Due to advances in fluid dynamics technology, Halo eyewash provides 20 percent better protection than other designs.

In addition to superior washdown, this eyewash model also guards users from cross contamination on several levels. Halo's exclusive self-draining feature eliminates standing water left in the unit between uses and testing. The innovative self-draining Aquaduct™ design reduces the risk of bacteria growth when the unit is not in use, improving hygiene and worker safety. The integral strainer inside the Aquaduct further reduces debris in the water for additional eye protection and also prevents clogging. The strainer is easy to remove and clean during routine testing.

Another exclusive product feature is Halo's separate supply and waste pipes, which eliminate the potential for cross contamination from the clean inlet and wastewater, again protecting the user.

Dust covers provide another layer of protection and keep units clean and ready for emergency situations. Halo models are equipped with either plastic or stainless steel bowl covers that shield the entire bowl from misuse and contamination. The see-through plastic allows for quick and easy visual inspection and the hinging mechanism provides a more secure hold. The fixture is activated as the cover is opened and may be installed on barrier-free fixtures.

NEW STAINLESS STEEL ENCLOSED SAFETY SHOWER FEATURES HALO

Armed with 300-series stainless steel construction, Bradley's new enclosed safety shower provides innovative drenching technology, including its Safety Shower as well as Halo eye/face wash for a full body washdown. Perfect for applications that demand the hygienic, non-corrosive properties of stainless steel, this new model delivers swift and exceptional washdown capability in emergency situations.

In addition to the freestanding stainless steel enclosed safety space for added privacy, its stainless steel roof and walls protect the enclosure from degradation due to prolonged exposure to harsh chemicals.

The proprietary enclosed shower design includes a sloped center drain or multi-drain system, allowing flexibility in installation. A patent-pending removable floor grate panel system featuring stainless steel slats is easy to install and remove for maintenance and cleaning.

Bradley's exclusive design eliminates stagnant water in the pipes, reducing the chance for any harmful bacteria to grow. An antimicrobial modesty curtain is also included for additional privacy.

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All Halo eyewash models, including the Stainless Steel Enclosed Safety Shower model, include an integral strainer to reduce debris in the water and prevent clogging, while the self-draining sprayhead ensures no stagnant water remains for any bacteria to grow, improving worker safety and hygiene.

SPECIFYING FOR SAFETY - EMERGENCY EYEWASH & SHOWER EQUIPMENT

Facilities using eyewashes and shower equipment must comply with the ANSI/ISEA Z358.1–2014 Standard. This standard specifies installation, testing, performance, maintenance, training, and usage requirements for emergency eyewash and drench shower equipment.

Learn how to equip your worksite's emergency safety equipment to ensure compliance, maximize effectiveness, and provide protection for employees. Bradley offers complimentary site surveys to assist in preparing facilities to meet the ANSI/ISEA standard. We invite you to sign up today.

For more information visit:

- https://www.bradleycorp.com/safety-shower-eyewash-site-survey
- https://www.bradleycorp.com/halo
- https://www.bradleycorp.com/product/stainless-steel-indoor-enclosed-safety-shower-with-tepid-water-inlet

Emergency Safety Solutions

PERFORMANCE, MEET SAFETY

Bradley provides an unparalleled variety of industrial solutions and depth of expertise. Our comprehensive line of emergency safety products for eye/face wash and drench shower applications ensure the 15 minute flush required by ANSI/ISEA Z358.1. With reliable, effective safety products that are available when and where you need them, Bradley is the name to trust.

Emergency Safety Solutions. Brought to Life.

bradleycorp.com/halo

Bradley

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Considerations For Selecting Fall Protection PPE

Understanding OSHA requirements and ANSI standards, as well as identifying the risks of your jobsite and application through a comprehensive hazard assessment – are important considerations for choosing the proper fall protection PPE for your organization.

UPDATES TO OSHA 29 CFR § 1926.95 "PERSONAL PROTECTIVE EQUIPMENT IN CONSTRUCTION"

Released in December 2024 and effective January 13, 2025, the revised standard clarifies the language around PPE fit. Specifically, § 1926.95(c) now states that "*Employers must ensure* that all personal protective equipment: (1) Is of safe design and construction for the work to be performed; *and (2) Is selected to ensure that it properly fits each affected employee*."[1] Prior to the change, § 1926.95(c) did not include the language about proper fit.

In the notice of proposed rulemaking, OSHA explained that "proper fit" in the construction industry means that the PPE:

- "is the appropriate size to provide an employee with the necessary protection from hazards"; and
- "does not create additional safety and health hazards arising from being either too small or too large."[2]

ANSI/ASSP Z359.14: "SAFETY REQUIREMENTS FOR SELF-RETRACTING DEVICES FOR PERSONAL FALL ARREST AND RESCUE SYSTEMS"

The latest edition of ANSI/ASSP Z359.14, published in July 2021, features several updates to Types, Classes, and Performance Requirements of Self-Retracting Devices (SRDs).[5] The deadline for manufacturers to comply with this edition was August 2023.

TYPES

SRD "Types" help the manufacturer determine what type of tests they should perform based on the SRD design. The 2021 updates have added a new type of SRD (SRL-P, a device compact enough and approved by the manufacturer to be worn on a full-body harness) and removed another (SRL-LE) from the list.

CLASSES

Classes are now used to describe products for overhead only products (Class 1) and leading edge rated products (Class 2). These classes explain how much free fall the unit can handle and if it has been tested for a fall event over an edge.

PERFORMANCE REQUIREMENTS

There are no longer multiple performance requirements depending on Class. SRDs must now comply with specific limits for Maximum Arrest Force, Average Arrest Force, and Maximum Arrest Distance.

CONSIDERATIONS FOR PPE SELECTION

Conducting a comprehensive hazard assessment to determine the unique risks and concerns associated with your jobsite and application is an important first step in selecting PPE. Additional considerations include:

- Harnesses: Factors to consider may include potential hazards in the specific application – such as working at height, welding, or arc flash – and wearer comfort, mobility, and adjustability for a proper fit, especially in light of OSHA's recent updates.
- SRDs: Considerations for SRDs can include distance from connection point and whether the device is designed for leading edge or non-leading edge, as indicated by the Class shown on the product label. To help simplify PPE selection on the jobsite, safety managers may wish to seek out products with different color housings for SRDs certified for leading-edge versus non-leading-edge applications. In cases where welding or arc flash are potential risks, specialized SRDs that are better suited to withstand these conditions are available.

Another important factor is the anticipated timing and deadlines for when you may require new products to be available on-site. In other words, you may need it now. Look for a manufacturer with a dedicated inventory of their latest and most popular products in place, with transparency around stock and order lead times, so you can help your team start the job on time with the proper equipment.

1. https://www.ecfr.gov/current/title-29/subtitle-B/chapter-XVII/part-1926/subpart-E/section-1926.95
2. https://federalregister.gov/d/2024-29220
3. https://www.ansi.org/about/introduction#
4. https://www.assp.org/about/
5. https://webstore.ansi.org/standards/asse/ansiasspz359142021


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TRY BEFORE YOU BUY
MSA sets the standard for fall protection. Our PPE is designed
for comfort and compliance–so you can focus on productivity.
Find out how you can qualify for a free product trial before you buy.
MSAsafety.com/dare-to-compare

The Top Job Site Hazards Facing Today's Worker

By Kyle Sullivan, Contributor

Construction sites are one of the most dangerous workplaces in the world. Construction involves heavy machinery, elevated spaces, and a fast-paced environment with multiple teams operating at the same time. Proper safety protocols are critical to avoid even minor oversights that could cause injuries or even fatalities. Obeying safety regulations isn't just a matter of compliance; it's a moral imperative to protect workers and reduce legal liabilities.

According to OSHA, the "Fatal Four" hazards on a construction site are falls, struck-by accidents, electrocutions, and caught-in/between accidents. These four are responsible for the majority of construction-related injuries and deaths. Poor communication, lack of training, inadequate PPE, and equipment failures often contribute to these accidents. Recognizing and addressing these threats helps to create safer job sites.

MAJOR CONSTRUCTION HAZARDS AND HOW TO PREVENT THEM

Falls from Heights – The Leading Cause of Fatalities

Falls account for about 40% of all construction fatalities. Scaffolding, ladders, and rooftop falls are the main culprits, and any work done at height requires strict safety protocols. Prevention stems from proper planning like fall arrest systems, guardrails, and safety nets. Workers should always be trained in fall prevention techniques and understand how to use harnesses and other protection equipment.

Struck-By Accidents – Avoiding Heavy Equipment and Vehicle Risks

Struck-by accidents occur when workers are hit with moving vehicles, equipment, or falling objects. These are most common on busy job sites with cranes, forklifts, or dump trucks in operation. Workers can prevent these types of accidents by using high-visibility clothing, clear signage, and designated pathways for pedestrian traffic. Equipment operators should always be highly trained and vigilant, and all machinery should be regularly inspected.

Rigging Accidents – Preventing Load Failures and Injuries

Improper rigging of loads can lead to serious accidents such as dropped materials and collapsed cranes. Rigging requires specialized workers with experience and precise training. Only certified personnel should perform rigging operations, and routine inspections of slings, hooks, and lifting devices should always be in place. Proper load calculations and communication are also essential to avoid accidents in rigging situations.

Electrical Hazards – Staying Safe around Live Wires and Power Tools

There are many electrical hazards on construction sites; live wires, power tools, and temporary electrical setups pose a constant risk to workers. Electrocution can occur from contact with overhead lines or faulty wiring. Prevention starts with de-energizing circuits before work begins, using ground-fault circuit interrupters (GFCIs), and making sure all workers receive electrical safety training. Regular equipment checks and proper lockout/tagout procedures are key.

Trench and Excavation Collapses – Best Practices for Stability

Trench collapses, while rare, are a silent but deadly hazard, often trapping workers under tons of soil or material. These accidents can be prevented through protective systems like shoring, shielding, and sloping. OSHA standards require inspections by qualified personnel before and during excavation work. Soil analysis, safe access and egress, and keeping heavy equipment away from trench edges also play major roles in prevention.

PROACTIVE SAFETY MEASURES FOR CONSTRUCTION CREWS

The Role of PPE in Preventing Workplace Injuries

Personal protective equipment (PPE) is an important line of defense against construction site hazards. Hard hats, safety glasses, gloves, high-visibility vests, and steel toed boots should all be worn in different work site scenarios. Proper fit, condition, and usage of PPE all contribute to its effectiveness in safety. Supervisors should enforce PPE requirements and conduct regular audits of workers' equipment.

Training and Communication: Building a Safety-First Culture

A strong safety culture starts with comprehensive training and open communication. Toolbox talks, safety drills, and on-the-job mentoring help reinforce safe practices. Encouraging workers to report hazards and near-misses without fear of reprisal fosters a proactive approach to risk management. Leadership must model safety-first behaviors to drive lasting change.

Regular Site Inspections and Equipment Maintenance

Routine site inspections help identify potential hazards before they cause harm. Checklists should cover everything from scaffolding integrity to fire extinguisher availability. Equipment should be serviced regularly, with records maintained for accountability. Investing in maintenance prevents breakdowns and keeps operations running smoothly and safely.

CONCLUSION: PRIORITIZING SAFETY FOR A MORE SECURE JOBSITE

Key Takeaways for Reducing Construction Site Hazards

- Falls, struck-by incidents, electrocutions, and trench collapses are leading causes of construction injuries.
- Prevention starts with planning, training, and using proper safety equipment.
- Communication and routine inspections are very important in maintaining a safe work environment.

Companies must make safety a core value, not just a compliance checkbox. This means investing time and effort into employee training, empowering safety officials, and encouraging worker participation in safety initiatives. Creating a culture where safety is everyone's priority and responsibility helps construction companies protect their workers, promote productivity, and build a reputation for excellence.

Kyle Sullivan is the Vice President of Business Development, Sullivan Industrial Services (sullivanindustrialservices.com).

Da Brim PRO Brims

When temperatures rise, heat stress becomes a serious threat for crews working outdoors. Da Brim PRO helmet brims help to mitigate heat stress safety concerns on the jobsite. Our brims offer the cooling comfort of shade for the new Type II construction safety helmets being adopted in the industry. With over a dozen years making innovative helmet brims, sun protection and shade are our business.

All Da Brim PRO brims:

- Offer UPF50+ sun protection, improving safety and reducing both fatigue and heat stress
- Keep team members dry and comfortable in the rain with water-resistant materials
- Really stay on even in inclement weather due to patented attachment technology
- Are easy to install
- Keep team members looking sharp and professional , adding a little style to a safety helmet
- Are compatible with many construction helmets that do not have a pre-molded brim

The **PRO Tech** brim is our original professional brim and specifically engineered for rugged construction and work-at-height environments. The PRO Tech brim is made with tough 1000d CORDURA fabric that is abrasion resistant and durable. Many of our original customers are still using the same brim they purchased years ago, a testament to the product's durability and value. We've added safety yellow and orange to the line-up this year.

The **PRO Tech Lite** is a lightweight wide brim shade solution and offers added visibility with hi-vis fluorescent yellow and 3M reflective trim. Weighing only 3.3 ounces, this product is ideal for those looking to improve comfort without much additional bulk and weight.

The **PRO Builder** is a narrow brim and offers the familiar size and shade of a full brim hard hat. Many colors including white, black, gray, and safety yellow are available to coordinate most helmets.

All products are in stock and conveniently available direct or through our authorized distributors, including major construction supply companies such as White Cap and Fastenal and local PPE providers. Company logo and custom color runs are available with low MOQs and rapid turnaround times.

Da Brim is a leader in the sun protection and helmet brim space, offering excellent shade at an affordable price. We pride ourselves on making high quality and durable products to keep workers cool and sun safe. With a robust and reliable supply chain, we're able to deliver quality products quickly. Da Brim PRO has you covered. Contact us today. 510-240-9065. DaBrimPRO.com, info@dabrimpro.com

Da Brim PRO

Leaders in Sun Protection for 12+ Years

Keep Your Team Cool

•

Reduce Heat Stress

- UPF50+ sun protection
- Water resistant
- Super easy install
- Compatible with Type II helmets without pre-molded brim
- High quality and reliable, fast supply
- Order direct or via safety supplier
- Discounts on bulk orders

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Construction Safety Helmet Brims

PRO Tech

Rugged & durable
Hi-vis now available

PRO Builder

Familiar look of hard hat
Multiple colors available

PRO Tech Lite

Hi-vis & lightweight
Reflective adds visibility

Cutting-Edge Technologies Streamline Safety on Commercial Construction Sites

By Konnor Kamm, Contributor

Ensuring construction worker safety has always been a top priority for the industry. With the guidance of OSHA and the American Society for Safety Professionals, it continues to evolve with new training standards recently announced to eliminate hazards and risks that can cause illness, injuries, or fatalities.[1] Today, technology plays a critical role in streamlining safety through innovations that start far before boots hit the ground on the job site.

Here are six ways that construction leaders are transforming site safety by leveraging tech advancements at every stage of a project.

BIM ENABLES SAFER PLANNING

Building Information Modeling (BIM) is a digital representation of a building's physical and functional characteristics that helps project managers simulate and assess site safety before construction begins. This three-dimensional modeling identifies design flaws, plans emergency exits, and optimizes workflows to minimize risks.

For example, when preparing for excavations, Riley Construction coordinates site utilities early in order to flag design discrepancies and constructability issues not noted on the initial design. The project team then maintains BIM models through the project lifecycle to ensure that safety measures are clearly defined and followed. This is an ideal way to prevent accidents or injuries during construction because the utilities have been accurately located before the shovel hits the dirt.

MOBILE APPS FOR SAFETY COMPLIANCE AND REPORTING

Mobile technology is making a major impact in ensuring compliance with safety protocols. Apps such as Safety Reports and Safety Culture's iAuditor make it easy to provide real-time safety updates and streamline incident reports. Workers can identify potential problems quickly, report them to the project team, and implement solutions.[2] Preplanning and insurance checks are also conducted this way. Mobile apps also allow supervisors to track worker certifications and compliance, ensuring that only qualified personnel handle specific tasks.

DIGITAL INSPECTIONS AND TRAINING

Today, workers can access training materials, safety guidelines, and on-site orientation videos directly from their smartphones, ensuring they understand job safety protocols and stay up-to-date on best practices. In the past, workers who already have a long list of job tasks have also had to contend with printing, scanning, and emailing numerous forms to document various aspects of job site inspection, tool and equipment safety, and near-miss reporting. Now, with the scan of a QR sticker on hardhats, workers can quickly and efficiently track reporting to ensure work meets project specifications and building codes. By implementing online safety inspections at Riley Construction, the company has noticed a significant increase in form completion.

ADVANCED TECHNOLOGY FOR WORKER SAFETY

Wearable technology, from smart helmets that detect fatigue to watches that monitor vital signs, is revolutionizing worker safety, health, and productivity. Many vests, boots, and hard hats are equipped with sensors that detect potential dangers and provide real-time alerts if a worker enters a high-risk area. GPS tracking locates employees in case of an emergency. Biometric wearables track workers' heart rates and

It's every leader's responsibility to evaluate new technologies and determine their value in keeping workers safe.

1 https://ehsdailyadvisor.blr.com/2025/02/assp-releases-new-construction-worker-training-standard/
2 https://www.constructiontechreview.com/news/the-impact-of-apps-on-construction-site-safety-nwid-1764.html

Thanks to emerging technologies, safety starts far before boots hit the ground on the job site.

detect signs of fatigue, reducing the risk of accidents caused by exhaustion. Construction tool balancers also reduce upper body strain with active weight distribution for zero gravity handling during heavy demolition.

Proximity sensors detect objects nearby or within a set radius without physical contact. Devices such as Beacon tracking software are frequently used in healthcare and K-12 education settings, which enables users to monitor patient or student movement without contact while maintaining hygiene.[3] Last year, 42% of workers reported having tested or interacted with location-tracking tech at work.[4]

Additionally, robotics is transforming safety on job sites with equipment such as the MULE (Material Unit Lift Enhancer). This masonry game-changer eliminates heavy lifting and repetitive motion, reducing physical strain and increasing work speed and efficiency.[5]

AI FOR PREDICTING AND PREVENTING ACCIDENTS

Artificial intelligence is already transforming safety by planning for and preventing accidents before they happen. Using historical data, AI identifies patterns, assesses site conditions, and predicts high-risk behavior. All of this helps teams spot and eliminate potential danger. From smart PPE monitors that can alert to environmental hazards like a gas leak to AI-automated bots that operate equipment in high-risk conditions, the technology is improving daily. While that's good news, team must ensure that AI systems comply with data privacy regulations and ensure that employees know how to use it effectively.[6]

DRONES HIT A HIGH NOTE IN SITE SAFETY

When it comes to site inspections and identifying hazards, drones have become an essential tool for construction safety management. It's one technology that can improve project timelines and reduce risk without the need for a major capital investment. Today, drones are used on at least 37% of construction sites, and they can significantly reduce the need for workers to climb to high areas for inspections.[7]

These unmanned aerial vehicles (UAVs) enable swift inspections of hard-to-search areas, providing real-time data to identify risks like unstable structures and equipment failures without exposing anyone to potential danger.

As the industry evolves, technology will continue to provide innovative ways to reduce or eliminate safety risks. It's every leader's responsibility to evaluate new solutions and determine their value in keeping workers safe and enhancing project outcomes.

Konnor Kamm is a Field Safety Specialist, Riley Construction (rileycon.com).

3 https://www.rileycon.com/compassion-in-construction-nicu-renovation-for-the-tiniest-patients/
4 https://www.nsc.org/workplace/safety-topics/work-to-zero/safety-technologies/proximity-sensors?srsltid=AfmBOoqTq5rMLiCIWKeu3fhZfHaNt4XUoXvxdyL2_numSrZq6__eEqhB
5 https://www.construction-robotics.com/did-you-know-that-the-mule-is-more-than-just-a-masonry-tool/
6 https://getmojo.ai/blog/the-role-of-ai-in-construction-safety/#:~:text=AI%2Dpowered%20systems%20use%20computer,safety%20managers%20can%20intervene%20proactively.
7 https://www.commercialuavnews.com/how-drones-are-making-construction-projects-safer

Protecting Hands with Purpose: How Field-Driven Design Shaped Milwaukee®'s Anti-Vibration Glove Line

On today's jobsites, safety isn't just about avoiding immediate hazards—it is about preventing long-term injuries that build up over time. Across the trades, professionals are increasingly `aware of the risks posed by extended tool use, particularly when it comes to hand and arm health. From fatigue and reduced grip strength to more serious conditions like Hand-Arm Vibration Syndrome (HAVS), the effects of daily vibration exposure are real—and difficult to ignore.

In response, Milwaukee Tool took a field-first approach in developing their Anti-Vibration Gloves. The in-depth design process was grounded in direct jobsite feedback from users across the country operating demo hammers and other vibration-heavy tools. This information played a critical role in shaping how and where material reinforcements were placed. The result is an addition to the Milwaukee glove lineup that delivers full-hand vibration reduction while maintaining the dexterity and durability that daily use demands.

Milwaukee Tool's new ANSI/ISEA 105-2016 Anti-Vibration Cut Level 4 High-Dexterity Nitrile Dipped Gloves offer a best-in-class balance of protection and precision. Built with an 18-gauge material for total hand mobility, these gloves are ideal for applications requiring both vibration control and fine motor skills—like fastening small hardware or handling delicate components. A long-lasting nitrile dip coating provides abrasion resistance, while reinforced zones between the thumb and index finger ensure durability in high-contact areas. Critically, when measured to the ISO 10819 vibration transmissibility test, these gloves outperform standard designs in limiting vibration transfer to the palm and fingers. Additionally, this glove features Milwaukee's color-coded wristbands for easy cut-level identification, reinforcing broader safety protocols in the field.

Milwaukee's Anti-Vibration Work Gloves further extend this performance philosophy to broader applications. Reinforced in high-wear zones—like the palms, fingertips, and grip points—these gloves are built to last through tough, repetitive tasks. A breathable lining and terry cloth sweat wipe enhance comfort, while an integrated SMARTSWIPE™ knuckle allows for easy touchscreen use without removing gloves or smudging devices.

What sets these gloves apart is not just the performance, but the process behind their creation. Milwaukee's research and development teams, along with the dedicated safety specialists, worked closely with trades professionals to develop a glove that meets real-world demands. Every material choice and reinforcement pattern were informed by feedback from the field—prioritizing the needs of professional users and aligning with a growing focus on safety culture and compliance.

In a landscape where musculoskeletal injuries are drawing more regulatory and organizational attention, Milwaukee's Anti-Vibration Gloves offer more than just protection—they reflect a commitment to listening, responding, and designing with purpose. For safety managers and professionals alike, it is a reminder that small details—like the right glove—can make a lasting impact.

- Anti-Vibration Work Glove - XXL
- Anti-Vibration Cut Level 4 High Dexterity Nitrile Dipped Gloves

BEST VIBRATION PROTECTION.* HIGH DEXTERITY.

*Compared to Knit and Dip Anti-Vibration Gloves when measuring transmission of the ISO 10819 vibration profile to the palm and fingers

Work Zone Safety at Risk: How Clear Signage Can Protect Workers

By Nikki Johnson, Contributor

Work zones are among the most dangerous areas on roadways, posing risks to motorists and workers. With heavy machinery in motion, shifting lanes, and ongoing activity, clear communication is essential to prevent accidents. Safety signage and visual cues act as a critical first line of defense in guiding traffic, reducing confusion, and protecting lives.

THE IMPACT OF WORK ZONE INCIDENTS

According to the Federal Highway Administration (FHWA) and the U.S. Department of Transportation (USDOT), work zones remain hazardous areas for both workers and motorists:

- In 2022, 891 work zone fatalities were recorded—a slight decrease from 954 in 2021.
- In 2022, there were 106,000 work zone crashes, causing approximately 42,000 injuries.
- Struck-by incidents account for 46% of work zone deaths.

Safety signage and visual cues act as a critical first line of defense.

These statistics highlight the dangers of work zones, particularly when signage and visual communication tools are unclear or inadequate. Without proper guidance, drivers may not have enough time to react, increasing the likelihood of crashes.

To create safer work zones, it's essential to follow established guidelines for signage and traffic control. Following these regulations is critical to ensuring compliance and keeping both workers and motorists safe.

REGULATORY REQUIREMENTS FOR WORK ZONE SIGNAGE

Federal safety guidelines establish strict requirements for work zone signage to mitigate risks. The Manual on Uniform Traffic Control Devices (MUTCD) and the Occupational Safety and Health Administration (OSHA) set the standards for work zone safety signage, visibility, and traffic control measures. These regulations ensure that motorists and workers are properly informed of upcoming hazards, lane shifts, and detours.

According to the FHWA, work zone signage must be strategically placed to give drivers enough reaction time. Visibility is critical—signs must meet reflectivity standards to remain visible in all conditions, including nighttime and poor weather. Additionally, signs should be clear and consistent, using standardized colors, symbols, and wording to avoid misinterpretation. When work zones adhere to these guidelines, traffic flow improves, and the risk of accidents decreases significantly.

Key requirements include:

- **Proper signage placement:** Signs must be positioned at appropriate distances to give drivers adequate time to react. Placement is determined by factors such as speed limits, road conditions, and visibility.
- **Reflectivity standards:** Traffic control signs must be retroreflective to ensure visibility during low-light conditions and at night.
- **Use of advance warning signs:** Signs such as "Road Work Ahead" and "Lane Closed" inform drivers of upcoming changes in traffic patterns.
- **Traffic control devices:** Cones, barricades, and temporary pavement markings work alongside signage to reinforce safety messaging and guide vehicle flow.

TYPES OF SAFETY SIGNAGE AND HIGH-VISIBILITY MARKINGS IN WORK ZONES

From lane closures to detours, distinct types of signage are required to communicate effectively in work zones. These visual tools not only guide drivers but also establish protective boundaries for workers.

In addition to traditional signage, high-visibility markings and reflective materials play a crucial role in ensuring safety, especially in low-light or adverse weather conditions. Retroreflective sheeting, LED-enhanced signage, and high-contrast colors improve visibility, especially at night or in poor weather. Work zones that operate at night or during early morning hours rely on these materials to ensure that signs remain visible from a safe distance.

Different types of signs and visual cues are used to inform, warn, and direct traffic. These include:

1. **Regulatory signs:** Indicate legal requirements such as speed limits, detours, and lane shifts. Examples include "Speed Limit 45" and "Do Not Enter."
2. **Warning signs:** Alert motorists to potential hazards, such as uneven pavement, merging lanes, or workers present. Common examples include "Caution: Workers Ahead" and "Rough Road."
3. **Guide signs:** Direct traffic through detours and alternative routes. Examples include "Exit 1 Mile" and "Detour Ahead."
4. **Temporary pavement markings:** Provide lane guidance with reflective tape and temporary striping in areas where road markings are unclear or changing.
5. **Flagger stations:** Workers wearing high-visibility clothing use stop/slow paddles to control traffic flow. Flaggers are crucial in high-risk areas where driver confusion may occur.

Incorporating high-visibility materials into work zone signage is an effective strategy for improving driver awareness. Reflective tape, illuminated signs, and glow-in-the-dark markers ensure that critical warnings remain visible, even in the most challenging driving conditions.

The following best practices help ensure effective work zone signage and proper traffic control execution.

BEST PRACTICES FOR WORK ZONE SIGNAGE AND TRAFFIC CONTROL MEASURES

A well-designed work zone traffic control plan enhances safety for both workers and motorists by establishing a structured, predictable traffic flow. When drivers are given clear, visible, and correctly placed signage, they are more likely to follow road directions, avoid unexpected detours, and reduce the risk of accidents.

To improve work zone traffic control and signage effectiveness, several best practices should be followed:

- **Use multiple warning systems:** Supplement traditional signage with flashing beacons, electronic message boards, and rumble strips to capture driver attention.
- **Place barriers strategically:** Concrete or water-filled barriers provide a physical separation between workers and moving traffic.
- **Conduct routine inspections:** Regular assessments of signage placement and condition help identify issues such as obstructed or damaged signs.
- **Develop and follow a Traffic Control Plan (TCP):** A structured plan for signage and flagger positioning ensures compliance with MUTCD and OSHA regulations.
- **Monitor traffic behavior:** Traffic cameras and speed monitoring systems help assess how effectively signage is guiding drivers and allow for adjustments if needed.

Implementing these best practices minimizes risks, improves traffic flow, and creates a safer environment for both workers and motorists.

BUILDING A SAFER FUTURE FOR WORK ZONES

Work zones remain one of the most dangerous areas on the road, but strategic signage and visual communication significantly enhance safety. Federal regulations provide a clear framework for improving visibility and traffic control, helping to reduce confusion and prevent collisions.

Reliable safety signage in work zones not only ensures regulatory compliance but also plays a critical role in protecting lives and improving roadway safety.

Temporary traffic control signs, reflective pavement markers, and equipment labels play a crucial role in traffic management. They guide drivers, highlight hazards, and reinforce essential safety protocols for on-site workers. Durable, high-visibility materials ensure that signs and labels remain effective in varying conditions, from low-light environments to high-traffic zones.

As infrastructure projects continue to expand, properly placed, regulation-compliant signage remains a necessary component in preventing work zone incidents. Consistent and effective visual communication—through signs, labels, and pavement markings—helps drivers make informed decisions and enhances worker protection. Reliable safety signage in work zones not only ensures regulatory compliance but also plays a critical role in protecting lives and improving roadway safety.

Nikki Johnson is a Safety Professional, DuraLabel (duralabel.com).

ARMOR GUYS

New Addition to the Kyorene® Pro Family of Gloves

Introducing Armor Guys' latest addition to the Kyorene® Pro family of gloves: 00-849WP. 00-849WP is the ultimate winter glove; providing windproof and waterproof protection, this glove keeps your hands dry & warm in the toughest conditions. The outer shell of 00-849WP is made with 18-gauge, graphene-infused fiber, providing ANSI A4 cut resistance.

This glove combines two key features—waterproofing and cut resistance—to provide enhanced safety and comfort for workers and individuals engaged in various tasks where both water exposure and cutting hazards are present. The 00-849WP is made from materials that can withstand a certain level of cutting force, ensuring that sharp objects like glass, metal shards, knives, or other dangerous items do not easily penetrate the material.

00-849WP has a built in, waterproof layer underneath the outer shell made of environmentally friendly, high elasticity TPU & medium-permeability film material. This layer provides the ultimate water-resistance while also remaining highly breathable. This layer also has high tensile resistance, wind resistance, and cold resistance while remaining soft to the touch. The high elasticity TPU also has excellent bio compatibility, is non-toxic, non-allergic, and does not contain any irritating properties. In addition to the numerous benefits above, this glove also features a touch-screen design in the thumb, index and pointer finger allowing you to easily operate your mobile, and other devices, without needing to remove the gloves.

The microfoam nitrile palm coating provides excellent grip in wet and dry environments. Its highly resistant to abrasion, meaning it can endure harsh environments without wearing down quickly. This durability ensures that the gloves last longer and maintain their protective qualities, even with frequent handling of rough or abrasive materials. Due to the durability and abrasion resistance of microfoam nitrile coatings, gloves tend to have a longer lifespan, which reduces the frequency of replacements. This makes them a cost-effective option for industries that require high-performing gloves on a regular basis. The longevity of the gloves, combined with their ability to maintain grip and protection, makes them a smart investment for businesses.

The velcro closure on the wrist ensures the gloves keep a snug fit while working. The ultimate fit, feel, comfort & protection; these gloves are like nothing you've ever worn before. Windproof, waterproof & thermal regulating, your hands will remain dry and comfortable while you work outdoors in the harsh, winter climate. This applications for this glove are construction, cold storage, outdoor winter work and landscaping. This Kyorene® Pro glove is bacteriostatic, thermal regulating, odor neutralizing, and UV resistant. It's also free of stainless steel and fiberglass, resulting in gloves that are more comfortable, thinner, lighter weight and more dexterous.

In short, our Kyorene® Pro 00-849WP cut-resistant waterproof gloves provide unbeatable protection, comfort, and durability for a wide range of tasks, ensuring you stay safe and efficient all day long. Whether you're working in the rain, handling wet materials, or dealing with slippery or cold environments, these gloves are the perfect solution. Get yours today and tackle any task with confidence!

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NO STAINLESS STEEL • NO FIBERGLASS • BACTERIOSTATIC • ODOR NEUTRALIZING • THERMAL REGULATION • UV PROTECTION

KYORENE® PRO 00-849WP

Scan to request a sample!

Our best selling glove now available in a winter, waterproof version!

WATERPROOF

ULTIMATE FIT, FEEL, COMFORT & DURABILITY!

GOLD | Top 5%
ecovadis
Sustainability Rating
JAN 2024

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Delta Plus Introduces Game-Changing 21-Gauge Cut-Resistant Gloves: VENICUTD10 & VENICUTD11

Delta Plus is expanding its glove lineup with the launch of the VENICUTD10 and VENICUTD11 — next-generation 21-gauge cut-resistant gloves that set a new standard for comfort, dexterity, and protection.

When precision matters and protection is non-negotiable, gloves shouldn't hinder or be cumbersome to workers. This summer, Delta Plus is redefining hand safety with the thinnest, most advanced gloves the company has ever offered. The VENICUTD10 and VENICUTD11 deliver exceptional agility, tactile control, and high-level cut resistance — making them ideal for intricate tasks, small-part assembly, quality control, material handling, and more.

Despite their ultra-lightweight design, both gloves are rated ANSI Cut Level A4, providing reliable protection in a form that feels more like a second skin than traditional work gloves. This breakthrough combination of safety, flexibility, and comfort eliminates the need to choose between performance and protection. Workers can move confidently through high-risk environments with enhanced grip, precision, and ease of movement — without sacrificing safety or endurance.

KEY FEATURES:

- 21-Gauge Seamless Knit: Unmatched flexibility, breathability, and comfort for long shifts.
- ANSI Cut Level A4: Trusted protection in demanding and hazardous environments.
- Reinforced Thumb Saddle: Increased durability in high-stress zones, extending glove life.
- Touchscreen Compatibility: Seamless use of digital devices without glove removal.

TWO COATING OPTIONS FOR TARGETED PERFORMANCE:

- VENICUTD10: Polyurethane coating delivers excellent tactile sensitivity, secure dry grip, and minimal bulk — ideal for fine detail work and dry environments.
- VENICUTD11: Nitrile coating offers superior durability, strong grip in oily conditions, and enhanced abrasion resistance for tough industrial tasks.

Designed for professionals in manufacturing, construction, warehousing, and logistics, the VENICUTD10 and VENICUTD11 have already earned praise from early users as "the best A4 gloves they've ever worn." These gloves are engineered not only to meet expectations but to exceed them, delivering consistent performance across various job roles and conditions. Their lightweight build also reduces hand fatigue, promoting greater productivity and longer wear time.

Backed by decades of expertise and a mission rooted in worker protection, Delta Plus is a proud American manufacturer of premium safety helmets, widely trusted across job sites nationwide. Many of Delta Plus's helmets are made in the USA at the Woodstock, Georgia facility and reflect the company's ongoing commitment to quality, safety, and performance.

To meet the evolving demands of a global workforce, Delta Plus manufactures a complete line of personal protective equipment (PPE) worldwide — engineered to safeguard workers from head to toe. From helmets and gloves to high-visibility apparel and footwear, every product is built for durability, comfort, and real-world reliability.

The VENICUTD10 and VENICUTD11 represent the latest evolution in that mission — delivering cutting-edge hand protection designed for the hands that keep industries moving.

New 21 Gauge Gloves

Engineered for Excellence — The Thinnest Gauge, the Highest Performance by Delta Plus

- **Ultra-lightweight 21 gauge liner** (HPPE, Nylon, Spandex, Tungsten) making it the **thinnest and strongest glove available**
- **Advanced A4 cut resistance** with enhanced flexibility and **touchscreen capable**

ANSI/ISEA 105 A4 3 3

ANSI/ISEA 105 A4 4 3

- **Perfect for construction**, **assembly**, **automotive**, and **general industry**

Scan to **learn more** to learn more about our **21 Gauge offering.**

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CONSTRUCTION SAFETY

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