

Use Personal Protection to Ward Off Insect-Borne Diseases

By **Greg Schrab**
Ergodyne

We all know that bug bites suck. But these days, bugs are not just annoying. They also have the potential to carry serious, life-threatening diseases like Lyme disease and West Nile virus. Increasing international travel, climate change, environmental degradation, and changing human migration patterns all have contributed to shifting patterns of insect-borne disease in the United States and elsewhere.

Lyme Disease: Background and Symptoms

Reported cases of Lyme disease have risen steadily for the past 10 years and are spreading to new areas every year.

Lyme disease is transmitted through the bite of certain species of ticks:

- Black-legged or deer tick in the Northeast United States, and the
- Western black-legged tick in Pacific coastal United States.

The bacterium, normally found in mice, squirrels and other small mammals, does not harm these animals. Nor does it harm the deer these ticks feed on. However, it does cause serious disease when transmitted to people. Most cases occur in the spring and summer when ticks are in the nymph stage, and people are most likely to be outdoors.

The first symptom of Lyme disease appears three to 30 days after the tick bite. This is a circular rash around the bite site. It develops into a characteristic "bull's eye" with a clear center up to 12 inches in diameter. Patients also experience

painful lymph node swelling, joint pain, chills, fever, headache, muscle aches, and other non-specific symptoms.

Left untreated, the infection can lead to more serious symptoms such as drooping of the face (Bell's palsy), heart palpitations, dizziness, severe headaches, and joint pain. After several months, approximately half of all patients with untreated Lyme disease develop arthritis in large joints as well as chronic neurological problems, including cognitive difficulties.

Infrequently, Lyme disease can be severe, chronic and disabling, but is rarely, if ever, fatal. Symptoms can occur in some people following treatment, and Lyme disease can result in serious, life-long side effects.

Anyone who engages in outdoor occupations such as landscaping, brush clearing, forestry, and wildlife or parks management may be at risk of Lyme disease.

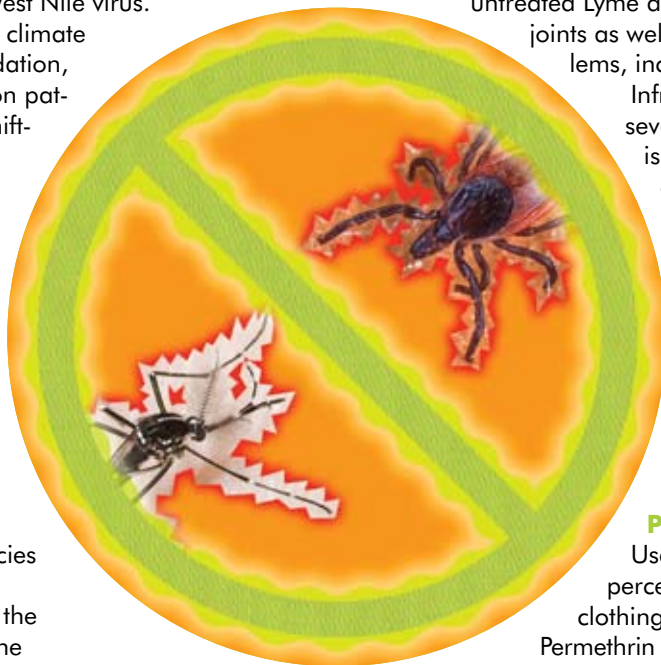
Preventing Lyme Disease

Use insect repellent with 20 to 30 percent DEET on exposed skin and clothing to prevent tick bites.

Permethrin repellent also kills ticks on contact and can be purchased at outdoor equipment stores that carry camping or hunting gear. Permethrin-based Insect Shield® Repellent Apparel is effective in repelling ticks. Insect Shield® clothing such as bandanas, hats, shirts, pants and socks can prove helpful in thickly wooded or tick-infested areas.

If you do enter a tick area, walk in the center of the trail to avoid contact with overgrown grass, brush and leaf litter.

Wear long pants, long sleeves, and long socks. Light-colored clothing will help you spot ticks more easily. Tucking pant legs into socks or boots and tucking shirts into pants help keep ticks on the outside of clothing. If you'll be ▶22



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ISEA member Ergodyne offers personal protection with Insect Shield

Protection UPDATE

News from the International Safety Equipment Association

Protection Update

is intended for anyone who specifies, purchases or uses personal protective equipment, and those who regulate it.

Protection Update is available via ISEA's website, www.safetyequipment.org.

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ISEA
INTERNATIONAL
SAFETY EQUIPMENT
ASSOCIATION

WARD OFF INSECT-BORNE DISEASES

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outside for an extended period of time, tape the area where your pants and socks meet to prevent ticks from crawling under your clothes.

Be sure to perform daily tick checks after being outdoors, even in your own yard. If you find a tick, remove it immediately using a fine-tipped tweezers. If a tick is attached to your skin for less than 24 hours, your chance of getting Lyme disease is extremely small.

West Nile Virus: Background and Symptoms

West Nile virus can infect mosquitoes, birds, people, horses, and some other mammals. The virus causes a spectrum of diseases ranging from flu-like West Nile fever to potentially fatal West Nile meningitis (inflammation of the brain and spinal cord covering) and even West Nile encephalitis (inflammation of the brain).

West Nile virus is transmitted by mosquitoes. The virus has spread quickly and is now endemic in all states except Alaska and Hawaii.

West Nile virus affects the central nervous system. Mild infections cause flu-like symptoms, including fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands or a skin rash. Symptoms can last from a few days to several weeks.

Acute symptoms requiring hospitalization — including severe headaches or confusion, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis — occur in less than one percent of those infected. These symptoms may last several weeks, and neurological effects may be permanent. Intravenous fluids and respiratory support are common hospital treatments, but no cure for West Nile virus has been discovered.

Preventing West Nile Virus

Similar to Lyme disease, personal protection measures that prevent insect bites are critical to reducing your risk. Always use insect repellent. The CDC recommends U.S. Environmental Protection Agency (EPA)-registered products for use as repellents applied to skin and clothing. The CDC has identified several EPA-registered products that provide repellent activity sufficient to

help avoid the bites of disease carrying mosquitoes. Products containing these active ingredients typically provide reasonably long-lasting protection, for example DEET, Picaridin, oil of lemon eucalyptus or PMD (the synthesized version of oil of lemon eucalyptus), or IR3535.

Published data indicate that repellent efficacy and duration depends on a number of variables including ambient temperature, type of mosquito species, amount of perspiration, exposure to water, abrasive removal, and other factors.

Beyond skin repellents, certain products containing permethrin are recommended for use on clothing, shoes, bed nets, and camping gear, and are registered with EPA for this use. Permethrin is highly effective as an insecticide and as a repellent. Permethrin-treated clothing repels and kills ticks, mosquitoes, and other arthropods, and it retains this effect after repeated laundering.

Some commercial products are available pre-treated with permethrin. Insect Shield® Repellent Apparel is proven and registered to repel mosquitoes—including those that can carry West Nile virus.

Summary

Ticks and mosquitoes are small and sometimes impossible to see. Unfortunately, insect-borne diseases are dangerous and aren't nearly as uncommon as they used to be. As a general rule of thumb, it's better to overprotect than under protect. When used properly, insect repellent and Insect Shield® Apparel repels or kills mosquitoes and ticks on contact. Use these prevention methods in tandem and those little critters won't know what hit 'em! ●

The U.S. National Institute for Occupational Safety and Health recently published new "Fast Facts" tools to help protect warm-weather outdoor workers against ticks and mosquitoes (2010-119); stinging insects (2010-117); poisonous plants (2010-118); heat stress (2010-114), and sun exposure (2010-116). They are accessible at www.cdc.gov/niosh.



U.S. Safety

'A Small Business with Big Capabilities'

"Spotlight on..." is a new *Protection Update* feature that each issue highlights an ISEA member company that is working hard to ensure that your workers are protected by world-class safety equipment. Answers to questions about U.S. Safety were provided by President and CEO J.P. Sankpill.

Can you give me some background on U.S. Safety?

Our headquarters in Lenexa, Kan., part of the greater Kansas City area, includes production and assembly facilities, prescription eyewear lab, warehouse, testing laboratory and administrative offices. Our company specializes in eye, face and respiratory protection. We employ about 120 people, serving the international market. Our U.K. branch, Parmelee Safety, is located in Birmingham, England. Find us at www.ussafety.com, and reach us at 800-821-5218 (7:30 a.m.-5 p.m. CT), or by fax at 800-252-5002.

What is U.S. Safety's history?

U.S. Safety was founded in 1935 in Kansas City by Alfred F. Parmelee, an engineering consultant. In his work, Mr. Parmelee witnessed an urgent need for better worker protection in industrial settings and quickly decided that if the inherent dangers of the workplace couldn't be eliminated, he would design products that would provide the protection workers needed.



Alfred F. Parmelee

To launch his efforts, Mr. Parmelee formed United States Safety Service Company in 1941 in a theater building in Kansas City, Mo. The company had one employee — Mr. Parmelee's wife, Dorothy. Together, their determination ultimately resulted in the 1944 patent of the "Saf-I-Shield," the first one-piece plastic eye shield.

Over the next several decades, Mr. Parmelee built the company on a loyal following developed through innovation, quality and personal service. Through growth and

U.S. Safety's headquarters in Lenexa, Kan.

acquisition, including Cesco Safety Products in 1967, the company secured a leading position in several industries and developed substantial U.S.



government contracts. In 1985, Mr. Parmelee's son-in-law, L. Alan Sankpill, assumed leadership and in 1987, the company was re-introduced as "U.S. Safety."

We are proud to be in our third generation of family leadership, while maintaining the highest level of employee longevity and experience in the industry. U.S. Safety is celebrating our 75th year in business and currently is the only privately owned manufacturer of eye, face and respiratory protection in the United States.

How would you describe U.S. Safety's mission?

U.S. Safety was founded on the idea of providing better worker protection, and that remains our commitment to this day. Our sole focus is delivering innovative, cost-effective solutions to workplace hazards, developed through close relationships with end users and delivered to the market through our strategic distribution partners. With a deep sense of responsibility to our customers, we stand behind our products and services, and follow through on our commitments. Going forward our goal is to build upon that foundation and extend our reach to many more individuals within our target markets.

What are U.S. Safety's primary markets and how do you strive to meet their needs?

U.S. Safety consists primarily of two divisions: the prescription safety eyewear division, and the catalog division, which covers all non-prescription products, including eye, face, respiratory and OEM.

Companies in the prescription safety eyewear business are distinguished ▶24



Innovations from U.S. Safety include the Passport Rx™ prescription eyewear program, Hornet DX protective eyewear, and SafetyToes slip-on overshoes.

mainly by their level of service, and their ability to effectively administer the program. We begin with an in-depth understanding of the customer's needs and build custom programs around their unique requirements. We also offer the highly successful Passport Rx™ program, a turn-key solution that provides simplicity and value, yet still includes the selection and convenient service options of a custom program.

With a reputation for responsive service, U.S. Safety has developed a strong position in the petrochemical, utilities, transportation and manufacturing markets as the go-to provider of cost-effective, hassle-free prescription safety programs.

U.S. Safety's focus in its catalog division is primarily on its core competencies: eye, face and respiratory protection. However, we leverage our capabilities to bring niche products to market in other areas, such as workplace toe protection, where we can offer a unique solution for our customers. With our manufacturing base, we retain a high level of expertise in our core business, maintaining our own R&D and quality control. We do not try to be everything to everyone, but instead focus on what we know best and how we can translate our experience into value for the end user.

Where can prospects go to check out U.S. Safety products?

Globally and in the United States, go to www.ussafety.com; in Canada, visit www.dentecsafety.com, and in the United Kingdom, visit www.parmelee-safety.com.

Why should someone who needs safety equipment obtain it from U.S. Safety?

When someone uses a U.S. Safety product, he or she can do so knowing that it meets the highest performance standards in the industry and is backed by highly dedicated, experienced people committed to worker safety. U.S. Safety works directly with customers to develop new products that deliver real value and unique solutions.

What is the key feature that differentiates U.S. Safety from the others in the safety equipment business?

U.S. Safety is a private business with big capabilities, offering a unique combination

of expertise, personal service and flexibility.

Because of our size, we are able to interact with end users at every level of the company on a daily basis, even top leadership. Anyone can pick up the phone and call a senior executive at U.S. Safety without any hassles, which is very unlikely to happen with our major competitors. The customer experience is paramount at U.S. Safety and it's reflected in our customer loyalty. In addition to me, our senior executives are Marc Cooper, vice president, operations; Terry Meyers, vice president, finance, and Steve Fredricksen, prescription business manager. Contact information can be found on our Web site at "Contact Us."

Describe your offerings that provide unique performance characteristics not found elsewhere.

U.S. Safety's Passport Rx™ program has become known as "The Affordable Safety Eyewear Solution." It's a uniquely simple and cost-effective prescription safety eyewear program that's easy to implement, eliminates hassles and increases compliance. It's the only program of its kind and has become the go-to solution for companies of all sizes looking for a way to reduce costs while maintaining a broad range of product and convenient service options.

A more recent U.S. Safety innovation is Hornet DX protective eyewear. It's the direct result of customer requests for eye protection from airborne dust and debris that's comfortable, stylish, fog-free and Rx'able. Hornet DX uses "breathable barriers" that enhance air flow to prevent fogging and increase comfort, while keeping airborne particles out. A specially designed low-profile Rx insert accommodates a wide range of prescriptions. With aggressive styling and an optional strap, Hornet DX is the best looking, most versatile and effective eye protection available for extreme conditions.

Building on its mantra of "protection through innovation," U.S. Safety recently partnered with SafetyToes International of Canada to bring SafetyToes slip-on steel-toe safety overshoes to the U.S. market. Until now, it was the best kept secret in workplace toe protection. Its 100 percent EVA rubber composition maintains its flexibility at any temperature, provides superior slip resistance, and lasts longer than its PVC counterparts. ●

ISEA SETS THE STANDARDS

Updated Eye and Face Protection Standard Focuses on Hazards and Product Markings

By **Cristine Z. Fargo**

International Safety Equipment Association

An updated national consensus standard for safety eyewear now includes expanded criteria and test requirements for hazard-specific protectors and detailed language for minimum coverage and side protection.

The *American National Standard for Occupational and Educational Personal Eye and Face Protective Devices* (ANSI/ISEA Z87.1-2010) prescribes the design, performance specifications, and marking of safety eye and face products, including millions of safety goggles, spectacles, faceshields, and welding helmets worn by workers in thousands of manufacturing and research facilities, and other occupational and business settings.

The standard was developed by the Z87 Committee on Safety Eye and Face Protection, which is administered by the International Safety Equipment Association (ISEA), and it was approved by the American National Standards Institute (ANSI). One of the major changes from its predecessor versions is how the standard is organized, with focus on the hazard exposure rather than protector configuration.

"This hazard-based approach encourages users and employers to evaluate the specific hazards in their work environment, and to make the selection of appropriate eye and face protection based on this assessment," said Z87 Committee Chairman Dan Torgersen, vice president of Walman Optical, Minneapolis, Minn. "With the end-user in mind, the committee agreed early-on that the standard should represent a more hazard-based approach."

The revised document also includes evaluation criteria against splash, dust and mist hazards and provides product markings to allow the user to easily identify these performance attributes on any given protector. And it features a "Selection Chart" that can be posted to provide guidance on the selection of eye and face protection based on hazards in the working environment.

The standard can be purchased from ISEA for \$57 a copy; discounts are available on bulk orders. Orders may be placed via the online store at www.safetysiteequipment.org. ●

High-Viz Garments Labeled as Meeting Updated Standard Comply with MUTCD

The Federal Highway Administration (FHWA) has accepted high-visibility safety garments labeled as meeting an updated American National Standard as being in compliance with requirements of the FHWA's 2009 ▶28

ABOUT THE AUTHOR

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Order Complete Set of ANSI/ISEA Standards at Deep Discount

ISEA is offering a complete set of its 12 American National Standards 30 percent off the price of purchasing the publications individually. For \$325 including shipping, safety officers can get all the following publications in a convenient three-ring binder:

- *American National Standard for Limited-Use and Disposable Coveralls - Size and Labeling Requirements*, ANSI/ISEA 101-1996 (R2008)
- *American National Standard for Gas Detector Tube Units - Short Term Type for Toxic Gases and Vapors in Working Environments*, ANSI/ISEA 102-1990 (R2009)
- *American National Standard for Air Sampling Devices - Diffusive Type for Gases and Vapors in Working Environments*, ANSI/ISEA 104-1998 (R2009)
- *American National Standard for Hand Protection Selection Criteria*, ANSI/ISEA 105-2005
- *American National Standard for High Visibility Safety Apparel and Headwear*, ANSI/ISEA 107-2010
- *American National Standard for Air-Purifying Respiratory Protective Smoke Escape Devices*, ANSI/ISEA 110-2009
- *American National Standard for Fixed and Portable Decontamination Shower Units*, ANSI/ISEA 113-2008
- *American National Standard for High Visibility Public Safety Vests*, ANSI/ISEA 207-2006
- *American National Standard for Occupational and Educational Personal Eye and Face Protection Devices*, ANSI/ISEA Z87.1-2010
- *American National Standard for Industrial Head Protection*, ANSI/ISEA Z89.1-2009
- *American National Standard - Minimum Requirements for Workplace First Aid Kits and Supplies*, ANSI/ISEA Z308.1-2009
- *American National Standard for Emergency Eyewash and Shower Equipment*, ANSI/ISEA Z358.1-2009

Order directly online or download a faxable order form at www.safetysiteequipment.org.

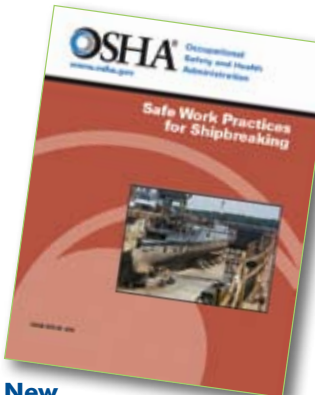
MAKING WORKERS SAFER AROUND THE NATION



Ansell's online Protection Solutions Guide



Examples of MSA's customized hardhats



New shipbreaking safety guide and eTool for electrical utility workers from OSHA



NIOSH poster on disposable respirators



The following new services and innovations have been introduced by **International Safety Equipment Association** member companies to help make workers safer:

- From **Ansell Protective Products** – www.ansellpro.com – is an online version of its *Protection Solutions Guide*, a reference to the company's hand-protection products. The guide (www.ansellpro.com/product-catalog/) is designed to match its printed counterpart, but allows for enhanced product navigation.
- From **MSA** – www.msanet.com – is *Logo Express Customization Service* bulletin #0617-03, which has been updated to include the latest information concerning logo artwork, reflective striping, standard logos, other customizing options, and add-ons for any MSA hardhat.
- From **Sperian Protection** – www.sperian.com – come findings from two studies conducted among North American safety directors showing that eye safety is linked to a successful culture of safety. Of 150 safety managers surveyed in one study, more than two thirds agree it is possible to build a stronger culture of safety in the workplace by starting with better eye safety.

U.S. Occupational Safety and Health Administration (OSHA) – www.osha.gov – is implementing a new **Severe Violator Enforcement Program** (SVEP) and increasing civil penalty amounts. "The new SVEP is intended to focus OSHA enforcement resources on recalcitrant employers who endanger workers by demonstrating indifference to their responsibilities under the law," OSHA said. "This supplemental enforcement tool includes increased OSHA inspections in these worksites, including mandatory OSHA follow-up inspections."

In other actions to enhance worker safety, OSHA has:

- Issued a direct final rule requiring employers to notify their workers of all hexavalent chromium exposures. The rule, which took effect June 15, revised a provision in OSHA's hexavalent chromium standard that required workers to be notified only when they experienced exposures exceeding the permissible exposure limit.
- Published an enforcement memorandum aimed at protecting Latino and other non-English-speaking workers from workplace

hazards. The enforcement memorandum directs compliance officers to ensure they verify that workers are receiving OSHA-required training in a language they understand.

New OSHA communications products include:

- *Safe Work Practices in Shipbreaking*, which offers ways to help protect workers and outlines employers' obligations to provide safe work environments. Shipbreaking workers are exposed to asbestos, falls, electric shock and fires.
- The "Electric Power Generation, Transmission and Distribution" eTool, which addresses OSHA's standard and explains preventive measures for protecting workers, such as providing personal protective equipment (PPE) and using lockout/tagout procedures.
- An updated *Screening and Surveillance: A Guide to OSHA Standards* that describes what physical examinations and tests are required to measure worker exposure to chemicals and other workplace hazards, such as noise and bloodborne pathogens.
- *Safety and Health Information Bulletins* to help protect workers from electrical hazards and amputations.
- Redesigned "Small Business" Web page that provides links to numerous resources and information designed specifically for smaller employers, including the free On-site Consultation Program.

National Institute for Occupational Safety and Health (NIOSH) – www.cdc.gov/niosh – has published **new bilingual posters and cards that show proper disposable respirator use**. The "How to Properly Put On and Take Off a Disposable Respirator" card and poster may be downloaded from the Web site.

Other new NIOSH communications products include:

- A redesigned Web page on preventing work-related lead exposures with expanded contents and speedier navigation. Links on the page provide easy access to individual sections containing information for workers, employers, researchers and public health professionals.
- A Web page with resources specifically for protecting oil spill response workers

from potential safety and health risks as a follow-up to the Deepwater Horizon spill in the Gulf of Mexico.

- A **Chemical Hazard Guide “App”** downloadable for the “iPad.”
- *Worker Safety on the Farm*, a downloadable tri-fold brochure of information on various aspects of farm safety.
- *Safe Patient Handling and Movement* online web-based training, with downloadable booklet for nursing schools.
- *Workplace Solutions: Reducing Illnesses at Indoor Waterparks*, which offers interventions against exposure to numerous disinfection byproducts and microorganisms that can cause adverse health effects.

U.S. Chemical Safety and Hazard Investigation Board – www.csb.gov – has issued a new safety bulletin, *Seven Key Lessons to Prevent Worker Deaths During Hot Work In and Around Tanks*. The bulletin summarizes 11 accidents to highlight the key lessons that were found to be applicable to all or most of the incidents.

New from the U.S. Mine Safety and Health Administration (MSHA) – www.msha.gov – is a final rule revising requirements that MSHA and NIOSH use to approve sampling devices for monitoring miner exposure to respirable coal mine dust.

Also, MSHA has introduced a “**Safety Target**” package to help ensure safe operations of potentially hazardous underground coal mining equipment.

The New Jersey Department of Health (www.nj.gov/health) has published a brochure to help protect those who work with **rosin-core solder**, which is commonly used in many industries to make electrical connections. Also, the U.K. Health and Safety Executive (www.hse.gov.uk) has published detailed information on solder-flux fumes.

The American Industrial Hygiene Association has introduced new publications covering *ANSI/AIHA Z88.7-2010 Color Coding of Air-Purifying Respirator Canister, Cartridges, and Filters (SMEA10-435)*, and *The Occupational Environment: Its Evaluations, Control, and Management, 3rd Edition (BIHT10-566)*.

New from the American Powered Access Federation (www.ipaf.org) in partnership with four related associations is a “**Statement of Best Practices and General Training and Familiarization for Aerial Work Platform Equipment.**”

The American Society of Safety Engineers – www.asse.org – has released a new book, *Applied Mathematics for Safety Professionals: Tips, Tools and Techniques to Solve Everyday Problems*.

New from The Chlorine Institute, Inc. – www.chlorineinstitute.org – are two documents (a fact sheet and a poster) available free online to help **sodium hypochlorite (bleach) users avoid accidents caused by improper mixing of the chemical**. Key industrial uses of the chemical include disinfection in the food- and beverage-processing industries, and drinking water and wastewater treatment. Click on the “Bookstore.”

The National Fire Protection Association – www.nfpa.org – has released the 2010 edition of *NFPA 1600® Standard on Disaster/Emergency Management and Business Continuity Programs*, which is available for download free of charge. *NFPA 1600* establishes a common, high-level set of criteria for disaster and emergency management and business continuity programs.

K-Croft Industries – www.thesafetysoul.org – has published at a special introductory price *The Total Safety Committee Checklist – A Step-by-Step Handbook for Safety Committee Success*, which is described as a one-stop-shop for a month-by-month checklist of safety committee activities for committees just getting started and extra credit items for effective existing committees. Click on “Review and Order Books.”

New from the Workplace Safety Store – www.safety.1800inet.com – is a workshop-style **forklift safety training video** designed to reduce on-the-job injuries. The approach provides activity-based “how-to” training for operators, and allows them to demonstrate what they have learned. ●



NIOSH/CDC Web page on safety in response to the Gulf oil spill



Tank hot work safety bulletin from CSB



Screen from MSHA “Safety Target” package for coal mine operations.



Forklift training package from the Workplace Safety Store

CONSTRUCTION CORNER



Welders Are Exposed to Manganese Above Recommended Levels, Researchers Find

Researchers at the University of North Carolina and the CPWR – Center for Construction Research and Training – www.cpwr.com — have found that welders frequently are exposed to manganese at or above the American Conference of Governmental Industrial Hygienists-recommended limit of 0.2 milligrams per cubic meter. Some studies have detected a link between manganese exposure and a neurological condition similar to Parkinson's disease.

U.S. workers who may be exposed to welding fumes include more than 410,000 full-time welders and an additional one million workers who weld intermittently, with pipe fitters, ironworkers, boilermakers and sheet metal workers being the main construction trades involved, the CPWR said in a news release.

Also, the CPWR reported that scientists at the University of California, San Francisco, and UC Berkeley have reported that a device they developed for drilling holes in metal or concrete ceilings has been shown to reduce fatigue and risk of injury to workers performing a task. The overhead drilling device, which was refined on construction sites, represents the culmination of a five-year research project. Findings from the field evaluation were reported in the March 2010 *Journal of Occupational and Environmental Hygiene*. ●

NRMCA Introduces New Safety Publication for Mixer Drivers

The National Ready Mixed Concrete Association — www.nrmca.org — has added *Safety Series #16: Highway Work Zone Safety for the Ready Mixed Concrete Industry* to its growing library of mixer driver safety materials. This CD-based PowerPoint presentation with instructor notes joins other popular offerings that have helped improve mixer drivers' safety records, including customized programs that address preventing backing accidents and rollovers, and investigating accidents. Order from the Web site. ●

CSDA/OSHA Alliance Releases Electrical Safety Best Practice

The Alliance between the Concrete Sawing & Drilling Association (www.csd.org) and the U.S. Occupational Safety and Health Administration has released its fourth Best Practice, entitled *Electrical Safety* (CSDA-OBP-1004). The publication includes guidelines and preventive maintenance tips that should be applied to every workday, CSDA said. By following the advice given in this document, contractors can greatly reduce the chances of exposure to electrical haz-

ards. The fact sheet can be downloaded free from the Web site; click on the OSHA Alliance button.

Also, CSDA has launched a Web site for its magazine, *Concrete Openings*, enabling readers to access all of the content 24/7. "Creating the new Web site, www.concreteopenings.com, is a natural progression that will help the magazine grow and have a greater presence in the ever-evolving work of digital media and social networking," said Patrick O'Brien, the magazine's publisher. ●

> Get Info...

Find the FHWA letter of interpretation and ISEA's request at www.safetysystem.org. The revised 107 standard can be purchased from ISEA for \$62 a copy; discounts are available on bulk orders. Orders may be placed via the online store at www.safetysystem.org.

FHWA ACCEPTS HIGH-VIZ STANDARD from page 25

Manual of Uniform Traffic Control Devices (MUTCD), which is the basis for federal and state highway regulations.

The 2009 *MUTCD* requires right-of-way workers, flaggers and adult crossing guards to wear high-visibility garments that meet the *American National Standard for High Visibility Safety Apparel and Headwear*, ANSI/ISEA 107-2004, Performance Class 2 or 3. However, in early 2010 the International Safety Equipment Association (ISEA) published a

updated standard — ANSI/ISEA 107-2010. Because the 2009 *MUTCD* specifically references the earlier version of the standard, some marketplace confusion ensued.

ISEA sought an interpretation from the FHWA that garments labeled as meeting the updated standard would be acceptable, pointing out that requirements in the two standards for daytime and nighttime visibility essentially are the same. FHWA agreed, and issued an official interpretation stating that garments labeled as meeting the 2010 standard would be in compliance with the applicable provisions of the *MUTCD*. ●

OSHA \$100,000 CLUB OF SAFETY CITATIONS

The U.S. Occupational Safety and Health Administration (OSHA) proposed penalties of \$100,000 or more during the March 1 – May 31, 2010, period for the following alleged failures to protect workers from potential hazards, including many that could have been avoided or mitigated by personal protective equipment (PPE). Companies have 15 business days from receipt of citations and fines to request and participate in informal conferences with OSHA or to contest the citations before the independent Occupational Safety and Health Review Commission:

- BP North America and BP Husky Refining LLC, \$3,042,000 for 42 willful violations and 20 serious violations for exposing workers to a variety of hazards, including failure to provide adequate pressure relief for process units, at the BP Husky refinery in Oregon, Ohio. "OSHA has found that BP often ignored or severely delayed fixing known hazards in its refineries," said Secretary of Labor Hilda L. Solis. "There is no excuse for taking chances with people's lives. BP must fix the hazards now."
- South Dakota Wheat Growers Association, Aberdeen, S.D., \$1,610,000 following the Dec. 22, 2009, death of a worker who suffocated after being engulfed by grain at a company facility in McLaughlin, S.D. An OSHA investigation found 23 willful violations of grain handling and confined space standards. "The company's intentional disregard for its safety and health responsibilities puts its workers at risk, and more egregiously, led to an unnecessary loss of life," Solis said.
- VT Halter Marine Inc., \$1,322,000 following a November 2009 explosion and fire that killed two workers and seriously injured two others at the company's Escatawpa, Miss., ship-building facility. "The employer was aware of the hazards and knowingly sent workers into a confined space with an explosive and toxic atmosphere," Solis said.
- U.S. Postal Service, \$558,000 for violations at its Providence, R.I., Processing and Delivery Center. OSHA found untrained or unqualified workers performing tests on live electrical equipment, and doing so without adequate training, personal protective equipment (PPE), and signage.
- NDK Crystals, Belvedere, Ill., \$510,000 for willful and serious violations following an explosion at the company's crystal manufacturing facility that took the life of a truck driver parked at a nearby service station.
- FWT Inc., \$293,400 for violations uncovered at the company facility in Fort Worth, Texas. Citations included failing to properly protect employees' hearing and breathing, and failure to enforce and use PPE at the transmission tower manufacturing operation.
- U.S. Postal Service, \$217,000 for willful and serious violations, mainly for exposing workers to electrical hazards at the Denver Network Distribution Center. OSHA found workers performing testing on live electrical equipment without adequate training and PPE.
- U.S. Postal Service, \$210,000 for electrical and other hazards found during an inspection at the Bedford Park, Ill., processing center; OSHA investigated in response to employee complaints.
- Werner Construction Inc., Norfolk, Neb., \$202,000 following an investigation of a worker who was killed when caught in a roadway belt paving machine's screw conveyors.
- Elyria Foundry Co. LLC, \$201,500 for 32 safety and health violations at its operation in Elyria, Ohio; OSHA investigated after a worker sustained an injury requiring a lower arm amputation.
- Pineville Lumber Inc., \$189,730 for failure-to-abate workplace hazards identified during two previous inspections at the company's Varney, W.Va., sawmill.
- Allen Family Foods Inc., \$182,200 for a variety of safety hazards at its poultry processing facility in Harbeson, Del. Serious violations involved falls, PPE, machine guarding and respiratory protection.
- Telsi Builders, Newton, Mass., and a concrete subcontractor, Ocean State Forms Inc., Cumberland, R.I., \$178,800 relating to cave-in hazards at a synagogue under construction in Newton; OSHA found workers in a 14-foot-deep trench devoid of protection against sidewall collapse.
- Tireman Auto Service Centers Ltd., Maumee, Ohio, \$177,800 for willful and serious violations following an investigation into an accident in which four workers were injured when a tire exploded.
- Chipco LLC, a natural gas well salvage and capping business based in Zanesville, Ohio, \$165,000 following an investigation into the death of a worker at a natural gas well site in Londonderry, Ohio.
- National Standard Co., \$158,780 for 25 violations at the company's industrial wire worksite in Stillwater, Okla., including failure to provide fall protection and ensure employees were wearing PPE.
- Importers Service Corp. Jersey City, N.J., \$158,500 for failing to lock out energy sources and exposing workers to potential injuries during the maintenance and repair of equipment used to make items for the food, beverage and pharmaceutical industries; citations included lack of adequate PPE.
- AmeriCold Logistics LLC, \$153,000 for serious and repeat violations, mainly involving process safety management, at the company's Nampa, Idaho, facility.
- Hua Sheng International Group Corp., Barrigada, Guam, \$139,500 for hazardous working and living conditions at a jobsite and barracks in Harmon, Guam.
- William A. Berry & Son Inc., a Danvers, Mass., construction contractor, \$136,000 for 19 violations while removing asbestos-containing material at Beth Israel Hospital, Boston.
- Sewon America Inc., \$135,900 for a variety of safety violations uncovered during an inspection at its LaGrange, ▶ 30

SAFETY EQUIPMENT Works for You



Specs Save Electrician's Eyes from Arc Flash

Electrician Robert Greene found himself with an uncomfortable choice. He could either install a new switch on a hot bus bar that was supposed to have been de-energized, or disappoint a valued customer.

"Well, nobody wants to disappoint a customer," Greene wrote to MCR Safety. "So I put on my long-sleeve coat, safety glasses and hot gloves" and went to work, using a battery-powered drill to remove screws from the hot bus bar. Little did Greene realize that the chuck of his drill was not insulated from the drill body, meaning the hot screws he was removing were electrically connected to the chuck and drill body.

"Everything was fine until the drill got close to the grounded metal enclosure," Greene said. "At that point things happened very fast. When...the drill shorted out right in front of my face, the first thing I noticed was everything turned white. I pushed away from the switch gear and lied (sic) down on the floor." As a co-worker doused Greene's burning hair, the electrician thought he had been blinded. But quickly he realized that while his safety glasses were damaged, his eyes were OK.

"The next week I was at another electrical contractor's office...and I told him I was lucky I was wearing my safety gear," Greene said. "He told me...it wasn't luck because I always wear my safety gear, even when it's hot and uncomfortable... Always wear your safety glasses."

Klondike Plus protective eyewear by MCR Safety, Memphis, Tenn., www.mcrsafety.com.



HVAC Tech's Sight Saved from Freon and Debris

Robert Moctezuma, a service technician for a large climate control provider, was completing a maintenance check of an HVAC system in Houston. While measuring the Freon levels in a condenser unit, Moctezuma immediately realized something was wrong.

His pressure gauge read 325 pounds per square inch, which was significantly higher than normal. At that moment a hose leading to his gauge burst, sending Freon, dirt and debris flying everywhere, including into Moctezuma's face.

"At first I didn't even realize what had happened," Moctezuma told Gateway Safety. "I just wanted to get the Freon leak stopped. That's when I noticed something strange in my field of vision." He found a screw embedded point-first in the lens, with no metal reaching his eye.

"I'm surprised it held," Moctezuma said. "Three hundred twenty-five pounds is a lot of pressure. I'm not sure that many glasses would have held. StarLite® safety glasses saved my butt."

StarLite® safety eyewear by Gateway Safety, Cleveland, www.gatewaysafety.com.



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Ga., auto components manufacturing operation; citations included failure to provide employees with appropriate protection against hand injuries.

- Formosa Plastics Corp., \$133,500 for 27 violations, including exposing workers to combustible dust hazards, at its resin and petrochemicals plant in Delaware City, Del.
- Scovill Fasteners, \$133,350 for 60 violations; OSHA inspected after receiving a complaint about the partial amputation of an employee's index finger at the company's facility in Clarksville, Gas.
- H&H Woodworking Inc., \$130,800 for 26 violations at its custom architectural woodworking operation in Yonkers, N.Y.; OSHA inspected after an employee sustained a partial hand amputation on an unguarded radial arm saw.
- ERA Valdivia Contractors Inc., a Chicago-based industrial painting and sandblasting company, \$130,300 for exposing workers to dangerous lead materials.
- Lobo Tortilla Factory Inc., \$123,200 for violations following

a complaint-prompted inspection at the company's Dallas facility.

- Buckhorn Inc., \$116,000 for 16 violations found during an investigation into an accident in which an employee died after being crushed inside an injection molding machine at the company's plastic packaging manufacturing facility in Springfield, Mo.
- American Packaging Corp., Columbus, Wis., \$108,450 for 29 violations found during an October 2009 inspection; OSHA investigated after the company reported that a maintenance technician was killed during an explosion at the plant.
- Service Manufacturing Group Inc., \$106,800 chiefly for uncorrected and recurring hazards at the company's sheet metal fabrication plant in Buffalo.
- COMPUSPAR USA Inc., \$101,700 for failing to abate previously cited workplace safety and health violations at its electronic/electromechanical repair and rework facility in Allentown, Pa. ●