PPE: A Survivor’s Story

Carrie Banks • Communications Director • Alabama League of Municipalities

On December 15, 2011, at 11:40 a.m., lineman Greg McCoy with the City of Fairhope’s Public Utilities Department had just completed installing temporary fiberglass pulse arms to a 70-foot utility pole and was lowering his utility bucket when an aged wooden cross anchor collapsed, bringing two live wires in contact with his torso – delivering 12,470 volts of electricity and a 3,000-degree arc flash fireball in the process.

Even when everything is done right, something can still go wrong.

According to Fairhope Electric Superintendent Scott Sligh, the department was in the process of reconductoring several downtown lines by replacing narrow, outdated copper wire with larger, aluminum wire. From separate bucket trucks 10 feet apart, Greg and senior lineman Doug Brown were spreading existing, energized lines out to the side of a 70-foot power pole so the aluminum wire could be pulled down the middle. Ben Patterson, who had been with the department for about six months, was supporting their needs from the ground while the buckets were in the air.

This particular pole carried 46,000-volt wires at the top and 12,000-volt wires further down where Greg and Doug were working. “Because this was in the middle of downtown, we had to do the work energized.” Scott said. “We couldn’t afford to shut the power off for days at a time.”

Once the temporary pulse arms were installed, they began to lower their buckets. “Greg lowered his bucket first,” he said, “and, as he’s operating his bucket controls while looking down, the existing wooden braces collapsed, causing the cross arms to pivot, and two live wires – 12,470 volts – came in contact with Greg – one at the base of his neck, the other just above his right hip. The weight of the wires – around 200 pounds – knocked Greg into the bottom of his bucket.”

Immediately following contact, a hot-line tag, or emergency cut-off switch, activated. “The power went off in about a third of a second,” Scott said. Had the hot-line tag not been part of Fairhope’s safety protocol, the wires would have remained live, meaning rescuing Greg from his bucket would have been impossible until the power had been turned off.

Doug, whose bucket was higher than Greg’s and moving away from the pole, didn’t see the wires make contact, but he heard the arc flash and realized Greg was in trouble. He and Ben, who was on the ground between the two trucks, reacted immediately. “I couldn’t tell you an exact response time,” he said, “but I know it was less than two minutes that we had him out of that bucket and laying on the ground. In my opinion, we couldn’t have done it any better.”

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I n January 2002, the Alabama Municipal Insurance Corporation (AMIC) and the Municipal Workers Compensation Fund (MWCF) consolidated their risk management efforts and created a joint Loss Control Division. This solidarity allowed the two insurance programs, which have many common members, to provide a variety of safety services, including site visits, regional training, proactive driver and firearms training, at half the price. That spring, the first issue of Risk Management Solutions was printed.

Now, 10 years later, the Loss Control Division is an integral part of both the AMIC and MWCF programs and – after recently completing a structured strategic planning process – is currently developing its own website, www.losscontrol.org, and redesigning many of its materials. Beginning with this issue, Risk Management Solutions has been revamped to compliment the new website, which will launch later this summer and will be under continual development well into 2013. (So please visit often!)

MWCF Operations Manager Steve Martin said that a joint loss control effort was logical and has provided extensive benefits to the members of both insurance programs over the past 10 years. “While it’s difficult to measure the dollars saved, as the years have gone by, the loss ratios have decreased,” he said. “A good example is the impact of our SkidCar program; the number of auto accidents and the severity of injuries have decreased.”

Please visit the Loss Control’s website often for important updates, training opportunities, loss control bulletins, previous issues of Risk Management Solutions as well as information on the Loss Control Division’s staff and programs.

Emerging Health Issues in the Workplace

By Myra Forrest • AMIC/MWCF Safety Consultant • ALCM, ARM, CSP

D ue to emerging concerns such as flu pandemics and Methicillin-resistant Staphylococcus aureus (MRSA), workplaces are now dealing more frequently with employee-related health issues. Because of the many complicated privacy and employment related issues between employee and employer, it has become increasingly important that employers familiarize themselves with how these emerging health issues should be handled in the workplace. To address the range of benefit questions and employment-related liabilities, employers may need to address employee health issues as well as any workplace policies developed to comply with state and federal laws, including the Americans with Disabilities Act (ADA), Family and Medical Leave Act (FMLA), Genetic Information Nondiscrimination Act of 2008 (GINA), and the Health Insurance Portability and Accountability Act (HIPAA).

Workplace conversations regarding MRSA, or the Superbug, have increased within the past decade due to the emergence of community-associated MRSA infections. Once confined to hospitals and healthcare facilities, MRSA infections are now more commonly seen in workplaces, schools, fitness facilities and daycare settings.

A common bacterium called “staph” (Staphylococcus aureus) is found on the skin or in the nostrils of about 25 to 30 percent of healthy people and does not necessarily cause infections, or if it does, the infections are typically minor and can be treated with or without antibiotics. A staph bacterium becomes a serious infection when it has developed a resistance to the methicillin antibiotics normally used to treat it, resulting in a newly resistant bacterium referred to as MRSA. MRSA is primarily transmitted by skin-to-skin contact or contact with surfaces or items that have come into contact with a person’s MRSA infection. Serious infections from MRSA can result on the skin, in the blood stream, bones and lungs.

The use of basic hygiene practices are encouraged for addressing many workplace exposures to the common cold and flu along with newer, emerging health concerns such as MRSA. Handwashing is the most basic means for preventing the common cold and flu along with the more serious infections such as MRSA. Other practices should include showering, protecting cuts and scrapes, avoiding contact with another person’s wounds or bandages, eliminating the sharing of personal hygiene items and properly cleaning of sheets, towels and clothing. The Center for Disease Control and Prevention (CDC) has information and guidelines available that can significantly decrease the spread of infections in the workplace.

For more information on these guidelines, as well as resources regarding MRSA and the workplace, follow the CDC link www.cdc.gov/niosh/topics/mrsa.
Minutes later when Scott arrived on the scene, Doug and Ben had rescued Greg and the paramedics were on the way. “They had cut his (fall protection) harness off him and he was conscious and breathing,” Scott said. “His eyes were open, but he was in shock and struggling against his coworkers to get up.” Greg’s face had turned a deep crimson from the fireball flash caused by the shock, so when his protective sunglasses were removed, his skin looked normal underneath but an outline of the glasses remained. The flash singed his goatee, but, thanks to his nonconductive hardhat, his hair and the top of his head were unaffected.

Greg was air-lifted to South Alabama Regional Burn Center where he received two skin grafts and spent 11 days recovering from severe burns along his right side from his neck to his hip. He was released on December 26th, and, after nearly three months of rehab and physical therapy, Greg returned to work on March 6th with no restrictions.

**PPE and safety procedures save lives.**

Were it not for Fairhope’s required use of fire retardant (FR) clothing and personal protective equipment (PPE), thorough written safety procedures and regular in-house safety training, Greg’s unfortunate experience could have ended very badly. Instead, by following the strict safety protocol, Greg was safely removed from his bucket, cut from his harness and stabilized for the arrival of paramedics. Thanks to his PPE, the injuries he sustained from the high voltage electric shock were not life threatening.

According to Scott, Fairhope supplies and requires line workers to wear:

- Industry standard, nonconductive hardhats
- Impact-resistant safety glasses with side protection
- Rubber gloves if working with energized lines; leather gloves if cutting rope
- Fire-retardant clothing – long sleeves/long pants – with a hazard rating category 2 (HRC2)
- Fire-retardant outer wear such as rain suits and winter wear
- Rubber-soled, full leather boots
- Five-point, fire-retardant, fall-protection safety harness for all bucket work that is then clipped to the boom

In addition, employees attend a series of training on bucket and truck safety procedures as well as bucket and pole-top rescue training – which proved to be invaluable in Greg’s situation. Boom trucks, fiberglass sticks and gloves are periodically dielectrically tested to make certain they’re fully intact and safe, and a tailgate analysis is performed each morning, or if conditions change, to identify hazards and ensure the proper safety equipment is being used. Employees are also First Aid/CPR trained.

Scott stressed that all utility departments should invest in necessary PPE and then require their employees to use it. “The most important thing you can do at the end of the day is go home with all your fingers and toes,” he said.

Mayor Tim Kant is also a proponent of strict safety protocol. “City of Fairhope employees do not take for granted the dangers of their jobs,” he said. “The outcome of this situation could have ended much differently, and we are very fortunate Greg McCoy was wearing his equipment and has made a full recovery. The implementation of safety procedures and policies has proven to save lives and will help us prevent accidents in the future.”

**Lessons Learned.**

Even though he has no clear memories of the accident, Greg has a crystal clear message: “Follow the safety procedures and wear your PPE,” he said. “I’ve heard some guys say they don’t want to wear their glasses because sweat gets in their eyes. Imagine what would have happened if I hadn’t been wearing mine. FR and PPE work. I’m thankful for it.”

Doug said once you witness an event such as what happened to Greg, you’re happy to put the PPE on every morning. “The guys out there who do not want to wear the safety equipment need to quit this line of work and do something else – for themselves, their families and their employers,” he said. “If I want to go home at the end of the day and see my wife, my son and my daughter, it’s worth it.”

Thanks to Fairhope’s strict safety protocol, Greg was a survivor rather than a fatality.
Through an advanced, computer-controlled driver training vehicle known as the Skidcar System, trainees learn how to react quickly and safely to a range of hazardous driving conditions. Training is conducted throughout the state at a minimal cost.

For more information, contact Donna Wagner at 334-262-2566.

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<tr>
<th>Location</th>
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Date/location subject to change

**Summer Safety DVDs**

7.083 Inspecting Playgrounds for Safety  
7.084 Softball & Baseball Field Maintenance & Safety  
7.089 Working Safely in Hot Environments  
7.097 Heat Stress: Staying Healthy, Working Safely  
7.105 Groundskeeping Safety: Dealing with Bugs & Critters  
7.106 Groundskeeping Safety: Be A Pro!  
7.107 Heat Stress for Public Employees: Seeing Red  
7.108 Protecting Your Feet: Learning Your ABC’s  
7.110 A Practical Approach to Ladder Safety  
7.118 Safety Procedures for Lawn Mower Operators  
7.119 Landscape Power Tool Safety  
7.120 Hedge Trimmer Safety  
7.121 Video Guide to Chainsaw Safety  
7.122 String Trimmer Safety  
7.123 Boating Safety  
7.128 Golf Cart and Low Speed Vehicle Safety

Call, FAX or email your Video/DVD request to Rachel Wagner at: 334-262-2566; rachelw@alalm.org; or FAX at 334-263-0200.

**Need Help Filing Work Comp Claims?**

For step-by-step instructions, visit: www.alalm.org/MWCFClaimReporting.html

**Employment Practices Law Hotline**

1-800-864-5324

Through a toll-free Employment Practices Law Hotline, members can be in direct contact with an attorney specializing in employment-related issues. When faced with a potential employment situation, the hotline provides a no-cost, 30-minute consultation.

www.losscontrol.org