Electrical Safety and First Aid Assistance

Actual Incident:

At approximately 4:15 p.m., an employee installing a ground conductor inside a 277/480 VAC 3-phase panelboard was shocked when his wrench came into contact with the “A” phase lug of the three-wire system. The employee sustained first and second degree burns from the arc flash created by the contact with the “A” phase lug. The employee was hospitalized and treated for these burns for more than one month.

Assistance:

• Ensure your own safety, by making sure the scene is safe.
• If possible, and if it is safe to do so, shut off the source of electricity.
• Call 911 with explicit address & inform them the source of the current such as a downed pole, etc.
• Do not hang up on the 911 operator until told to do so.
• If you cannot shut off the source of electricity, attempt to move the source away from both you and the injured person using a dry, nonconductive object made of cardboard, plastic or wood; all without placing yourself at risk of electrocution.
• Begin CPR and use an AED if the person shows no signs of circulation, such as breathing, coughing or movement until EMS arrives.
• Try to prevent the injured person from becoming chilled.
• Apply a bandage. Cover any burned areas with a sterile gauze bandage, if available, or a clean cloth. Don’t use a blanket or towel, because loose fibers can stick to the burns.

Source: The Mayo Clinic

This information has been developed by OSHA and its partners with the intent to assist employers, workers, and others as they strive to improve workplace health and safety. This information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer’s legal obligations, which are defined by statute, regulations, and standards.