Chemical Burns Require Quick Response

Safety Talk

Occasionally, people are exposed accidentally to harmful chemicals. If that happens, immediate steps should be taken. Chemicals can cause serious or deadly injuries. Prompt first aid is vital to keeping any damage to a minimum.

If you work with chemicals, make sure you are familiar with the first aid required in case of exposure. This information is located on the chemical label and on the Material Safety Data Sheet (MSDS). You should also know the location and operation of safety showers and eyewash stations.

These are just a few basic guidelines for first aid treatment of chemical exposures:

FIRST – Protect yourself when helping others.
SECOND – Stop the injury or exposure.
THIRD – Get help.

Inhalation
Move the victim to fresh air and administer rescue breathing or Cardiopulmonary Resuscitation (CPR) if necessary. Call for medical help immediately.

Swallowing
Get medical help, check the MSDS, or call a poison control center to find out what to do. For certain chemicals you must induce vomiting, but for others, you must not. Do not give an unconscious person fluids to drink because that can cause suffocation.

Eyes and Skin
Chemical burns are among the most devastating injuries that can occur in the workplace. They can cause severe pain, blindness, disfigurement and death. Water is the nearly universal treatment

for burns, including chemical burns. If contact with a harmful chemical occurs, you must flush it with lots of water immediately.

Flush eyes for a minimum of 20 minutes. Use a clock—don't guess! Use low-pressure water. It may be necessary to hold the eyelids open.

For most chemical burns to the skin, flush with lots of water for a minimum of 15 consecutive minutes. Call for medical help right away, but continue flushing. As you continue flushing remove clothing which may be contaminated with the chemical.

If the burn is deep or from a more hazardous type of chemical such as a caustic, longer flushing times such as 30 or 60 minutes may be required. In the case of a dry chemical, you might be instructed by the MSDS to brush it away before you begin flushing. In the case of a chemical that reacts to water, other treatment may be specified on the MSDS.

Two types of chemicals that cause burns are acids and alkalis. Examples of acids are battery acid, sulfuric acid, hydrochloric acid, nitric acid and acetic acid.

Acids cause more visible damage at first than alkalis but they penetrate less deeply.

Some common alkalis are caustic soda, lye, drain cleaners, ammonia, cement and plaster. Alkalis can cause the worst injuries because they penetrate deeply into tissue cells. These burns may not appear as bad as they really are.

Rather than having to treat an injury, it is always far better to prevent chemical exposures. Become familiar with the chemicals used in your workplace and know how to protect yourself and others.

When handling chemicals, wear the recommended Personal Protective Equipment (PPE). This should include safety eyewear, gloves, footwear, aprons and other clothing made of special materials. This PPE may also include respiratory equipment. Strictly follow instructions for chemical storage, handling and mixing.

These guidelines are intended to serve as a reminder of basic treatments required for most chemical exposures. Know how to treat injuries from the particular chemicals you might encounter at work and off the job. And take every opportunity to further your first aid training!