HOLMES MURPHY

Safety Bulletin

Heat Stress

During the summer of 1995 over 100 Chicago area residents died during the summer heat wave. There were many more victims of heat-related illnesses such as heat cramps, heat exhaustion and heat stroke. Those that work in hot and humid environments are the most susceptible.

For a copy of a free one-page fact sheet, "Protecting Workers in Hot Environments," send a self-addressed label to OSHA Publications Office, Room N-3101, 200 Constitution Ave., N.W., Washington, DC. 20210. You can also call (202) 219-4667 or fax (202) 219-9266.

The following guidelines offer suggestions on the development of a heat stress program.

Water Provisions

Provide workers with a readily available source of cool, clean drinking water. Offer as much as a quart per worker per hour. Encourage workers to drink frequently and moderately. A 16 oz. glass every half hour when temperatures are high is more effective in the prevention of dehydration than larger amounts taken less frequently. The addition of salt to drinking fluids or in tablet form is unnecessary, and may be harmful for some people. Avoid alcoholic beverages as it dehydrates the body. You might also want to avoid drinks (hot & cold) that contain large amounts of caffeine as they can cause us to lose water.

Work Scheduling

Schedule heavy work for the cooler parts of the day. Rotate workers through strenuous jobs during the hotter part of the day. Alternate work and rest periods, and provide longer breaks so that workers can recover from the effects of the heat. If possible, let workers take breaks in an air conditioned or cool area/room.

Work Clothing

Have workers wear lightweight and light-colored clothing to reflect heat and sunlight and to help maintain normal body temperatures. Wear cotton that allows skin to breath and absorbs sweat, as opposed to synthetics that tend to trap heat. If work is outside, encourage workers to wear a shirt to shield them from the sun's rays and a cap or hat with a wide brim.

Workplace Ventilation

Provide good ventilation, such as cooling fans or air conditioners, throughout the workplace and especially in enclosed areas. Spot cool by local exhaust ventilation at points of high heat production.

Gradual Break-in

Gradually acclimatize new workers to work in hot environments. The human body can tolerate greater degrees of heat if it is allowed to adapt gradually. Daily two to four hour exposures for one week allow the body to acclimatize to most hot environments.

Heat Stress Training

Train management and employees on the effects and symptoms of heat stress. Management, in particular, should understand and monitor the National Weather Service (NWS) Heat Index Program. They also need to realize that obese and older workers, as well as those on certain types of medication, are most susceptible to heat-related illness.