KSU Facilities Safety Bulletin

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Electrical Safety

Electrical accidents can cause burns, shocks and electrocution, and without the proper electrical safety can lead to fatal accidents in a worst case scenario.

Three primary electrical hazards:

1. The first is electric shock. This is contact with electricity that causes a current to run through the skin, muscles or hair, and occurs when you become part of an electrical circuit. Its effect can range from nearly imperceptible to, well, devastating, with electrocution or death as the severest form of electric shock.
2. The second primary hazard of electricity is its potential as a source of ignition and cause of a fire or explosion. Static electricity, or static discharge, can also cause shocks. Generally, static events are not a likely danger in household and office situations, though they may be painful. However, in industrial situations their impact can be quite damaging.
3. The final major hazard is an electrical burn. These burns are largely internal, caused by the electricity that flows through tissue or bone, which generates heat that causes tissue damage. This can occur as a result of an electric shock, or from a lightning strike. These burns occur from the inside, out.

Three types of safety controls for electrical safety:

1. Engineering controls: Eliminate or reduce exposure to hazards through the use of engineered machinery or equipment. This is where the equipment you use or the environment you work in has built-in measures designed for your protection against specific hazards.
2. Administrative controls: Are the rules and regulations regarding safe work practices that are put in place by the government or your employer to protect your health and safety. They can include things like requiring breaks when doing repetitive work that puts strain on the body, limiting the time a worker is exposed to certain work conditions, or requiring the use of personal protective equipment, etc.
3. Personal protective equipment (PPE): Equipment worn to minimize exposure to a variety of hazards. It can include safety glasses, hardhats, steel-toed boots and gloves.

Source:
https://hsi.com/course-library/safety-compliance/osha/electrical-safety-training

June Vivid Courses

All: Heat Stress

Electrical Safety

Heat Stress

If you are exposed to heat in your work environment—and if you work outside it is likely that you will be—then the risk of heat stress illness and injury needs serious attention.

Those most affected by heat stress are people working in outdoor conditions and it is easy to forget about those working indoors where there is insufficient building insulation, ventilation, or cooling, or with tasks where heat is generated or warm conditions are required. Of course the risk of working outdoors presents greater risk depending on the regional setting; in the American southwest, summer is simply hotter and the climate is more arid than in other parts of the country, so risk of heat stress is naturally greater. But it is important to be clear that heat stress can and does happen when working inside, for many occupations.

It is critical that those who must work in extremely hot conditions understand the types of heat stress and ways to protect and prevent heat related illnesses and injuries.

Heat stress can result in heat stroke, heat exhaustion, heat cramps, heat syncope, or heat rashes. Heat can also increase the risk of other injuries to workers as it may result in sweaty palms, which make gripping activities more difficult; fogged-up safety glasses make it hard to see clearly; dizziness can make working at heights dangerous; burns may also occur as a result of accidental contact with hot surfaces, steam or sunlight. Heat can exacerbate high-risk working conditions to another level.

Source:
https://hsi.com/course-library/safety-compliance/osha/heat-stress