

Crush Zones of Finger Hazards – Tool Box Talk

DEPARTMENT: _	 DATE PRESENTED: _	/2009

While installing a pump two employees were aligning a motor on the housing. The motor which weighed approximately 200 pounds was suspended from an electrical hoist. The base had six bolts protruding while the motor flange had six slotted holes.

While one employee operated the hoist the other attempted to position the motor over the bolts. The hoist operator released his finger pressure on the hoist control and the motor dropped unexpectedly about one inch pinning the other employee's hand under the motor flange.

This is a typical injury type in many of our operations. Finger injuries are common and range from minor cuts and scrapes to wounds with major damage to bone, tendons, and ligaments. If not treated properly, serious finger injuries can lead to permanent deformity and loss of function.

A crush injury occurs when a compressive type of force is applied to the tissues. At the site of injury the tissues experience several forces simultaneously, including shearing, contusion, and stretching in addition to pressure. This scenario is much different from what the tissues experience when injured, for example, with a knife. According to the Bureau of Labor Statistics, the fingers are the second most frequently injured part of the body. The financial cost of these injuries is more than \$300 million per year in lost production time, medical expenses and workers' compensation.

There are several things you can do in order to prevent hand related injuries at home or in the workplace. Here are a few simple safety tips to follow in order to prevent a hand accident:

- 1. Don't wear rings, loose jewelry or bracelets that may catch on moving or stationary machinery.
- 2. Make sure to be conscious of where you place your hands at all times. Be cautious when placing your hands or arms near any moving parts.
- 3. Make sure you turn off machinery first before inspecting, cleaning or performing repairs.
- 4. Don't remove shields, guards or safety devices on equipment. Do not use equipment that has had any safety device removed.
- 5. Use caution when working with power tools.
- 6. Be careful when wearing gloves or loose clothing around equipment with moving parts.

Pay attention – It is hard to focus on the task at hand when others are vying for your attention. When chopping, moving hot items, or carrying a heavy object, it is important to take your time and watch what you are doing. These are prime opportunities to have an accident, which could result in a cut, burned or injured finger, hand or arm.

