SAFETY ALERT

Campus Incident—Thumb Tip Amputation

RISK MANAGEMENT & SAFETY

Date: September 2016

Category: Machine Safety

RMS Contact: Mike McCauslin, mmccausl@nd.edu

Contact RMS:
Tel: 1-5037

Description

An employee's right thumb tip was amputated while attempting to perform routine preventive maintenance on a return fan. The return fan had been de-energized, but was "free wheeling" due to building air flow as the supply had not been de-energized. While removing the fan guard, the employee's glove was pulled into the rotating flywheel amputating the right thumb tip without bone loss. The employee was treated at a local hospital.

Findings

- The employee and a partner were performing routine maintenance on the return and exhaust fan motors.
- The return fan was de-energized but not locked out.
- The supply fan was not de-energized.

Root Causes

- The hazard of the rotating belt and wheel was not recognized by the employee.
- The guard to the fan was removed before rotation had stopped.
- The employee did not de-energize and lock out the supply fan causing a "free wheeling condition".
- Equipment specific lock out tag out procedures were not available.

Recommended Actions

- Conduct lock out tag out refresher training for authorized employee.
- Provide equipment specific LOTO procedures and post at equipment.
- Evaluate sources for multiple LOTO issues and "free wheeling" conditions.
- Review and revise LOTO program auditing process as necessary.
- Review and revise the LOTO program accordingly.