Case 353. 44-year-old maintenance shop laborer died when struck by a non-seated pressurized tine rake tire he was servicing.

A 44-year-old male maintenance shop laborer for a dairy farm died when he was struck by a non-seated, pressurized, tubeless, 16-inch diameter tine rake tire he was servicing. Two of the decedent's coworkers had made several attempts to seat the tire bead on the rim. The tire was not removed entirely from the rim. They cleaned the beads, added a sealant and placed approximately 34 psi of air into the tire. The tire held the air but would not seat properly; the bead would not properly seat on one side. The two employees broke the tire back down two additional times, added more "Slick" lubricant and also used soapy water from a spray bottle, but each time they were unsuccessful in properly seating the tire. In addition, one of the two workers indicated he also hit the tire with a hammer to get it to seat and picked up the tire and dropped it many times. The workers could not remember if they tried a "bead seater" to seat the tire. When the tire did not seat, they quit working on it and a decision was made to take it to a nearby service station in the morning. The decedent quit his job task and attempted to seat the tire. He was observed dropping the tire several times. When these attempts were unsuccessful, he obtained a hammer from one of his coworkers and attempted to seat the tire by striking it repeatedly while the tire/rim was laying flat on the cement floor in the maintenance shop. After his last hammer strike, the tire explosively separated from the rim and propelled upward, striking him in the chest/neck/face. After regaining consciousness, he indicated he was having trouble breathing. Emergency response personnel transported him to a nearby hospital where he died shortly after arrival.

MIOSHA General Industry and Safety Division issued the following Serious and Other-than-Serious citations at the conclusion of their investigation.

Serious: MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ACT, ACT 154, P.A. 1974, AS AMENDED, SECTION 11(a):

The employer did not furnish to each employee, employment and a place of employment, which was free from recognized hazards that were causing or were likely to cause death or serious physical harm to the employee:

1. Employer did not provide restraint device to employees servicing tires used in agricultural operations.
2. Employer did not ensure that employees demonstrated their abilities to service tires safely.
3. Employer did not prohibit the striking of tire components with a hammer while under pressure to correct tire seating problems.
4. Employer did not prohibit employee from placing tire on flat and solid surface during servicing.

   Among others, one feasible and acceptable method to correct this violation is to:

1. Provide a form of restraint to employees servicing tires to constrain the wheel, tire, and all components in the event of an explosive separation.
2. Have each employee assigned to service tires demonstrate their ability to perform tasks safely prior to performing tasks.
3. Establish and enforce rules prohibiting employees from striking tire components with a hammer while tire is under pressure.
4. Establish and enforce rules prohibiting employees from placing tires on flat and solid surface during servicing.

Serious: RECORDING AND REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES, PART OSH 11, RULE 1139(1):

An oral report of a work-related incident resulting in a fatality or the inpatient hospitalization of three or more employees was not made within eight hours after the occurrence to the Michigan Department of Licensing and Regulatory Affairs, Michigan Occupational Safety and Health Administration, State Secondary Complex, 7150 Harris Drive, PO Box 30644, Lansing, Michigan 48909, phone
1-800-858-0397.

(Firm failed to report the death of employee within the required 8 hour time limit.)

Other than Serious: RECORDING AND REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES, PART OSH 11, RULE 1129(1):

A log of all work-related injuries and illnesses (MIOSHA 300), and/or the summary of work-related injuries and illnesses (MIOSHA 300-A), and/or the injury and illness incident report (MIOSHA 301), or equivalent forms were not kept by the establishment:

(No injury and illness logs kept for 2011 through 2014. Recordable injuries occurring in each of those years ranged from kicks from animals, fractures from falling equipment, and strains/sprains form uneven surfaces in the Facility.)