



MIOSHA NEWS

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One Worker Death Is Too Many

By: Martha Yoder, Deputy Director

It is an understatement to say that a workplace death is devastating. In fact, it is difficult to find words that can adequately describe the grief and loss that follow a death on the job.

In Michigan from January through August 2009, there were **14 worker deaths** determined to be MIOSHA program related. This means the deceased was employed in an occupation covered by MIOSHA and the fatality is related to a MIOSHA rule.

Nothing can replace these lives and our deepest sympathies go to the families and co-workers. MIOSHA's role is to investigate, issue findings, and use these findings to help ensure similar deaths don't occur in other workplaces.

We encourage you to share and discuss the summaries below. Use the opportunity to identify hazards at your facility and take steps to eliminate the possibility of a tragic incident.



Live connectors contributed to the electrocution of a 38-year-old technician.

General Industry

Caught by/between/in:

A **46-year-old tool room technician** was pinned between a lathe and the wall. Maintenance employees were moving a large lathe with a forklift and it fell while they were installing cribbing. **Recommendations:** Prohibit lifting or transporting a load that can fall during normal movement. Ensure operator safeguards other employees. Do not lift or transport loads not within the capacity of the forklift.

A **29-year-old farm hand** was making feed and became entangled in a power take-off shaft on a feed wagon. **Recommendations:** Instruct employees at the time of initial assignment, and at least annually, in the safe operation of all equipment. Install guards to protect employee from rotating parts.

Crushed by:

A **61-year-old mechanic** was caught between a coke oven door and the building structure when the building shifted during maintenance activities. **Recommendations:** Prohibit employees from placing their bodies beneath equipment supported by only a temporary single supporting means. Do not use a chain fall or hoist and pull for more than its rated capacity.

A **61-year-old machine repair person** was crushed by a machine transfer mechanism while working on a milling machine.*

A **27-year-old laborer** was run over by a truck. The deceased was directing the driver into a parking area. As the truck backed up, the right tire ran over the deceased's foot, knocked him down, ran between his legs, and crushed his pelvis.*

Electrocution:

A **38-year-old technician** at a fiberglass plant was electrocuted while making an adjustment on a melter electrode. **Recommendation:** Guard exposed live parts 110 volts or more from accidental contact.

Fall:

A **19-year-old window cleaner** was in a boatswain chair scaffold washing windows. The scaffold mechanism became free and the chair fell six stories to the ground.*

A **36-year-old safety worker** at a race track was riding on a platform attached to the back of a pick-up truck. The truck hit a dip and the deceased fell, breaking his neck.*

Struck by:

A **27-year-old mechanic** was struck in the head while working on a bus brake system. The rear air bag

inflated, slipped off the lower axle mounting pad, and struck the employee's head. **Recommendation:** Provide training on the hazards/safe operation of the job.

Construction Fatalities

Cave In:

A **37-year-old laborer** was in a trench repairing a broken water main. The excavation collapsed and mud encased the employee to shoulder level, and a piece of concrete rested on his shoulders. Rescue workers rendered assistance, but the laborer died.*

Crushed by:

A **45-year-old owner** was caught between a dump truck and box truck. The deceased left the running truck and walked between two trucks. The running truck moved ahead striking the deceased and pinning him between the vehicles. No witnesses/no citations.

A **48-year-old roofer** was on his knees on a roof, chalking a line. A load of roofing materials being hoisted became dislodged from a pallet, striking the deceased.*

Explosion:

A **42-year-old laborer** was cutting the top of a steel underground gasoline storage tank with an abrasive wheel cutting saw. As the deceased made the fourth cut fumes/gases inside the tank exploded.*

Fall:

A **19-year-old roofer** slipped and fell 19 feet to the ground while installing a tarp on a steep roof.*

*These fatalities are under investigation.



An explosion during a cutting operation killed a 42-year-old construction laborer.

2009 Fatalities*

Caught/Crushed By:

General Industry

Technician – Age 32

Source: Falling equipment

Mechanic – Age 61

Source: Equipment and building

Mechanic – Age 51

Source: Machine mechanisms

Farm Hand – Age 29

Source: Power take-off

Construction

Rofer – Age 48

Source: Falling pallet

Laborer – Age 27

Source: Moving truck

Owner – Age 45

Source: Pinned between vehicles

Cave In: Construction

Laborer – Age 37

Source: Excavation

Explosion: Construction

Laborer – Age 42

Source: Fumes/gases in tank

Electrocution: General Industry

Technician – Age 38

Source: Exposed live electrical parts

Fall:

General Industry

Window Cleaner – Age 19

Source: Equipment Failure

Safety Worker – Age 36

Source: Moving Truck

Construction

Rofer – Age 19

Source: Slipped from Work Surface

Struck by: General Industry

Mechanic – Age 27

Source: Air line/Air bag explosion

*Through August 2009



Working to Create Michigan's Future Today



Doug Kalinowski, CIH
Director

New OSHA Director

As we move toward 2010, we are approaching the 40th anniversary of the federal Occupational Safety and Health Act and the 35th anniversary of the MIOSH Act. Tremendous progress has been made since passage of this important legislation to protect worker safety and health on the job.

For example, in 1977 (the earliest year records are available), 115 Michigan workers lost their lives in MIOSHA-related workplace deaths. In 2008, the number was 37. To date

with the perspectives MIOSHA has taken for many years. To help make long-term changes in worker safety and health, we have used a combination of new, innovative and traditional approaches.

2010 Strategic Plan Goals

MIOSHA is currently operating under its third five-year strategic plan. The goals of these plans have focused on cultural change through fair and firm enforcement, broad outreach efforts, "Connecting MIO-OSHA to Industry," and working together through strong alliances and partnerships to reduce workplace injuries, illnesses and fatalities.

Under our strategic plan, MIO-OSHA sets goals for each year. For Fiscal Year 2010, MIOSHA has committed to continue its emphasis on presence in the workplace through proactive consultations and planned inspections. Our goals include:

- Interventions in at least 6,000 Michigan workplaces,

"To keep moving forward, OSHA and MIOSHA leadership must adopt goals, establish targets, and keep pushing the bar higher."

in 2009, 17 people have lost their lives. Still too many. Still unacceptable. But it is definitely strong progress in the right direction.

To keep moving forward, OSHA and MIOSHA leadership must adopt goals, establish targets, and keep pushing the bar higher. And, employers and workers must be willing to step up efforts in their workplaces.

On July 28th President Obama announced his intention to nominate **David Michaels** to lead federal OSHA. Dr. Michaels is currently interim director of the Department of Environmental and Occupational Health, School of Public Health, at the George Washington University in Washington, DC. The nomination requires Senate confirmation.

Dr. Michaels stated that once confirmed he will move forward with four major priorities for OSHA:

- Issuing a workplace injury and illness prevention program,
- Increasing training grants,
- Developing new electronic recordkeeping and reporting systems,
- Launching a public awareness campaign to "change the way the nation thinks about workplace safety."

These priorities are consistent

- Conducting more than 150 MIOSHA Training Institute (MTI) courses throughout the state for approximately 22,000 participants,

- Recognizing five new MVPP and SHARP worksites.

These activities are some strategies to help achieve important overall five-year goals to keep Michigan workers safe. These goals include a 20 percent reduction in injury and illness rates for targeted industries and the construction industry. We also set a goal to reduce fatalities another 20 percent.

Our staff is charged with promoting the benefits of safety and health management systems (SHMS) during 100 percent of our interventions. We know an SHMS, tailored to the workplace, results in positive culture change and brings both humanistic and business bottom line benefits.

In all, MIOSHA has nearly 120 strategies to guide our work during the coming fiscal year. You have my commitment that MIOSHA will continue to work with the leaders within federal OSHA to improve workplace safety and health. Only by working together will we be successful in "Making a Difference" to reduce injuries and illnesses for Michigan's working men and women.

Interventions Provide "How to Abate" Information

What's the purpose of a MIOSHA intervention? ...government intrusion? ...regulatory oversight? No. It's about keeping people safe and healthy at work – avoiding the devastating consequences summarized in the cover article of this issue!

Our goal is to ensure MIOSHA interventions help identify and eliminate hazards by providing information that is useful, relevant and timely through our "Connecting MIOSHA to Industry" initiative.

We are determined to share practical "how-to" information that will effectively address an issue. Our staff visits many types of workplaces throughout Michigan. They observe creative and innovative solutions to workplace safety and health challenges implemented by employers.

The "Connecting MIOSHA to Industry" initiative encourages staff to recognize and compliment employers on these innovations. MIOSHA staff may also seek permission to share the solutions they see with others. We believe this makes MIOSHA more relevant and more "useful."

Several years back we implemented a *Customer Comment* card to provide ongoing feedback on how well we are doing in providing "useful" information. Our score in this area has been very high. More than 99 percent of those using MIOSHA services consistently rate the information shared as "useful."

Whether it's an occupational health, general industry safety, or construction issue, MIOSHA consultation and enforcement staff can be helpful partners in solving workplace issues to create safer, healthier workplaces.

Occupational Health Expertise

MIOSHA industrial hygienists are well-versed on how to anticipate, recognize, evaluate and control seemingly invisible hazards and work with employers to provide practical solutions and relevant information to real world problems. One industrial hygiene consultant told how he made hearing conservation training meaningful for a young audience by having them measure the decibel levels of their iPods!

Companies have shared these recent improvements as a result of MIOSHA interventions:

- Fine-tuned our PSM program to simplify the auditing process.
- Eliminated use of all methylene chloride.
- Revised rescue procedures for confined spaces.



Martha Yoder
Deputy Director

- Identified the need for a "sharps" container for utility blades.

Occupational Safety Expertise

MIOSHA safety consultants and compliance officers also have wide ranging experiences to share. Examples of recent safety enhancements as a result of consultations and inspections include:

- Established a program to inspect all cables, rigging, and pulling equipment.
- Cleared a fire exit door.
- Shared inspection results with employees, trained them to recognize the hazards identified in the inspection and implemented daily checks by employees.
- Installed safety railing on mezzanine level.
- Added training at the machine in addition to PowerPoint training.

Construction Safety and Health Expertise

Construction is a very competitive industry and contractors have demonstrated that safe and healthful worksites improve their bottom line. Contractors shared these improvements from MIOSHA interventions:

- Validated our interpretations of what the crane requirements are – it was a good benchmark.
- Encouraged subcontractors to wear PPE more consistently.
- Started requiring subcontractors to provide written documentation of safety meetings.
- Used inspection findings as topics for tool box talks.

We invite you to take advantage of our staff's knowledge and expertise whether it's a phone call, a website review, or a visit to your facility by a MIOSHA consultant.



CSM Group, Birmingham, received a MIOSHA visit during "Take a Stand Day" on August 26, 2009.

New Center Stamping Inspection Leads to Dramatic Safety Improvements

New Center Stamping in Detroit has raised the bar on workplace safety and health for its employees. This action was taken following a MIOSHA inspection.

In January 2009, MIOSHA completed a return visit assignment or "reinspection" at New Center Stamping. A reinspection is assigned when a previous comprehensive inspection results in five or more hazards classified as "Serious." In Fiscal Year 2008, MIOSHA conducted reinspections at 110 companies.

Hazard Abatement

As part of the settlement process, New Center Stamping worked cooperatively with MIOSHA to address hazards identified in the inspection and to make improvements in their overall safety and health system. MIOSHA and New Center Stamping staff discussed options for abating issues identified in the inspection. Some of the items included mechanical power press guarding and press inspections, electrical wiring, and confined space entry and training.

At the company's request, MIOSHA enforcement staff made a return visit to the facility in a monitoring capacity to review abatement, provide suggestions, and feedback. The monitoring visit included a plant visit to review press guarding accomplished by installing 2-hand controls that are bolted in place at an appropriate distance.

MIOSHA staff also reviewed the confined space evaluation that had been completed. At the end of the cooperative efforts by New Center Stamping and MIOSHA personnel, all items had been addressed.

In addition to working cooperatively with MIOSHA enforcement personnel, New Center Stamping also invited MIOSHA's Consultation Education and Training (CET) Division staff into the firm to conduct training. CET staff has been used to assist

with specialized training and technical standards understanding.

Management Commitment

Greg Smith, Owner, New Center Stamping, demonstrated his commitment and strong desire to address the issues of the inspection, by attending the 2009 Michigan Safety Conference, including sessions on Mechanical Power Press guarding. Mr. Smith has taken positive, proactive steps to familiarize himself with MIOSHA safety requirements and safety and health management systems.

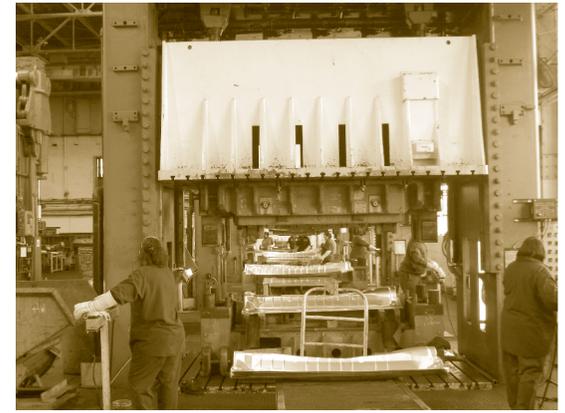
"We have seen improvements since the inspection. The application of a written safety and health program rolled into the New Center Stamping Quality Operating System has helped the company target applicable safety metrics that are monitored for continual improvement," said Smith. "This has also helped in creating an improved safety culture throughout the organization."

Prior to the reinspection, New Center Stamping had a safety program, including a safety committee. However, since the inspection the company has taken steps to put the program in writing with responsible parties and audits. There is also strong top management involvement, which is critical to ensuring success.

MIOSHA Reinspection Program

The General Industry Safety and Health Division reinspection program was implemented in 2006. The purpose of the return visits is to see whether safety and health measures put in place to satisfy a previous inspection are being maintained. Workplaces are selected for reinspections based on the following criteria:

- A previous comprehensive inspection has been conducted; and
- At least five hazards classified as "Serious" or "Repeat Serious" are part of the final order record of



New Center Stamping made significant improvements in press inspections, and 2-hand safety controls.

the inspection; and

- The comprehensive inspection is closed.

The reinspection assignments are in addition to the division's overall targeting list which is prepared using a combination of data sources including workers' compensation, MIOSHA inspection history, employer directories, and information collected through the federal OSHA data initiative.

Employers selected for inspection cannot be provided advance notice. However, MIOSHA sends letters to establishments that are on our targeting list. The letter offers free voluntary services from the CET Division, such as an on-site evaluation of its safety and health system. That evaluation temporarily pre-empts the planned inspection.

In addition to comprehensive visits, the division also conducts inspections and investigations in response to employee complaints, referrals, accidents, and fatalities.

"Taking the time to follow MIOSHA regulations can not only protect workers – it can greatly enhance a company's bottom line," said MIOSHA Director **Doug Kalinowski**. "Successful Michigan companies have shown that a strong safety and health program contributed to increased production, improved quality and greater profits."

Plan Now for an H1N1 Influenza Outbreak

*By: Matthew Macomber, M.S., CIH
GISHD TB/Infectious Diseases Specialist*

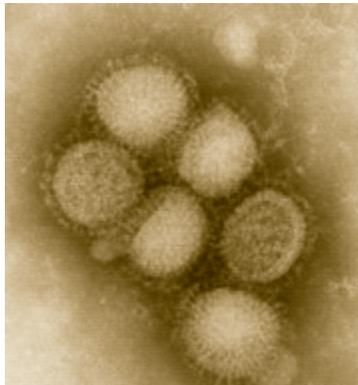
On June 11, 2009, the **World Health Organization (WHO)** declared that a global pandemic of Influenza A (H1N1) was underway by raising the worldwide pandemic alert level to **Phase 6**. Currently the H1N1 flu is active in nearly all states.

By using practical control measures and updating policies, employers can limit the impact the flu can have on their business operations. There are several things employers can do to ensure that their workplace will be prepared for flu season.

At the workplace, businesses can implement these common sense control strategies:

- Encourage frequent hand washing with soap and water, and supply anti-bacterial waterless hand cleaner.

- Routinely clean common areas that are frequently touched by



An electron microscope image of the H1N1 influenza virus (CDC Influenza Laboratory).

workers.

- Communicate proper sneeze technique and the need to cover a sneeze or cough with a tissue or the crook of the arm.

- Encourage employees to get vaccinated.

Preventive Business Strategies

The **Centers for Disease Control and Prevention (CDC)** recommends employers develop new strategies to enable workers who are sick or caring for sick loved ones to stay home, in order to limit the impact of an outbreak at work.

The CDC offers the following suggestions:

- Encourage sick workers to stay home until their fever is absent without medication for 24 hours.

- Expect sick employees to be out for about 3 to 5 days in most cases, even if antiviral medications are used.

- Limit crowded work settings, space workers farther apart, cancel non-essential travel and meetings, increase teleworking, and use staggered shifts.

- Ensure your sick leave policies are flexible and consistent with public health guidance and that employees are well aware of these policies.

- Do not require a doctor's note for workers who are ill with influenza to validate their return to work; doctor's offices and medical facilities may be too busy to provide documentation.

- Employees who are well but who have an ill family member at home with influenza can go to work as usual. However, these employees should monitor their health every day, and notify their supervisor and stay home if they become ill.

- Maintain flexible policies that permit employees to stay home to care for an ill family member.

The CDC and federal OSHA have developed resources to help employers limit the impact of the flu and assure operational continuity during flu season. The material is on their websites: www.cdc.gov and www.osha.gov.

**Bob Pawlowski, CIH, CSP,
Director, Construction
Safety & Health Division
517.322.1856**

New Communication Tower Standard – Part 29

By Paul Wrzesinski, CSHD Safety Supervisor

With many towers being constructed across the state to accommodate increased cell phone use and radio communication, there was a need to develop a standard to protect employees engaged in this dangerous work.

The *Construction Safety Standards Commission* worked with industry and MIOSHA to develop rules that are easy to read, understand, and comply with when erecting communication towers. Prior to the standard, MIOSHA and federal OSHA used Instruction CPL2-1.29 as guidelines when inspecting this type of work.

The *Communication Tower Standard*, Part 29, was filed with the Secretary of State on March 27, 2009, and became effective 14 days later. The new standard is very specific to communication tower construction and the unique hazards related to both safety and health on these projects.

New Protections

Emergency response for some of these sites can be an issue due to the remote location or limited site access. The new rules include an option for an employer to train and use employees to provide high angle rescue and emergency services.

Exposure to Radio Frequency Radiation (RFR) can go undetected if employers and employees are not properly trained in how to recognize and protect themselves and their employees. The new standard addresses RFR training issues.

Climbing these high structures (often more than 200 feet) poses hazards associated with proper fall protection and attachment points on existing towers that may be affected by deterioration, defects or damage. Inspecting these structures before allowing employees to work on them is crucial and must be conducted by a competent person.

The new standard allows employees to be lifted using a powered hoist-line under certain conditions, reducing the hazards associated with stress from free climbing.

The standard addresses the safe use of different types of equipment used almost exclusively in this industry such as: Gin Poles, Catheads, Capstans, Rooster Heads, and Foot and Crown Blocks.

The rules can be viewed on the MIOSHA website at www.michigan.gov/miosha.



Asbestos and Lead Hazards in Construction

By: Bill DeLiefde, CSHD Health Manager

Exposures to asbestos and lead continue to be the most frequently cited serious health hazards identified by the Construction Safety and Health Division (CSHD). These violations occur primarily on renovation and demolition projects where an asbestos and/or lead survey was incomplete or not conducted at all.

Another significant contributing factor is that project supervisors and workers commonly have not received adequate awareness training. They must be taught to not only recognize suspect materials, but to also carefully scrutinize survey information to assure all suspect asbestos or lead containing materials in their work areas have been identified and addressed through material sampling and analysis.

Why review asbestos & lead survey information?

Because asbestos surveys frequently only address "accessible" areas of a building or structure. The survey may not address suspect asbestos con-



This area is contaminated with asbestos containing material, due to improper removal.

taining materials (ACM) behind walls, above ceilings, beneath carpeting, etc.

Also, an asbestos survey may not properly address multi-layered construction materials like wall/ceiling plasters that have a mud base coat and skim coat or dry wall systems composed of dry wall and joint compound, all of which are suspect asbestos containing materials and distinct homogenous (similar color and texture) materials that must be analyzed separately.

On lead surveys involving painted materials, it is critical to assure all paint colors on a structure have been included in the survey and analyzed for lead content.

If you encounter suspect asbestos or lead containing materials that have not been addressed in a survey, work activities that disturb these materials should be stopped and reported for proper follow-up.

Please contact CSHD with asbestos or lead questions at 517.322.1856. The regulations are on our website at www.michigan.gov/mioshaconstruction.

We're Looking For Your Best Practices

By: Bob Pawlowski, CSHD Director

The MIOSHA program has long advocated the benefits of a safety and health management system (SHMS) to address workplace hazards. An effective SHMS is a decisive factor in reducing the extent and severity of work-related injuries and illnesses.

One of our most difficult tasks has been to help employers understand that the time and expense an employer puts into developing an SHMS is paid back well beyond the resources allocated.

Best Practices to Share

We are looking for "best practices" to help companies establish an effective safety system. We believe the best way to convince employers that safety pays is to show them real-life examples.

We are looking for specific examples of how you integrate safety and health into your daily work activities, and how that enhances your company's bottom line. We're looking for:

- Strategies that clearly demonstrate management's resolve to protect workers.
- Innovative ways you've increased employee involvement.
- Examples of safety expenditures that have really paid off.

If you have a best practice to share, please contact the CSHD at 517.322.1856. A questionnaire will be provided to help you share your success with other employers.

LABORER – ELECTROCUTION

In June 2008, a 45-year-old laborer was electrocuted when the arm of an excavator struck an overhead power line. The excavator was being used to set concrete pipe. The employee was working on the ground and was in contact with a chain hanging from the excavator arm when it contacted the power line. Electrocutions are one of the leading causes of construction fatalities and are one of four targeted areas in our strategic plan.

MIOSHA violations:

- Part 10, *Lifting and Digging Equipment*, Rule 1023 (1) – Not maintaining a minimum of 10 feet clearance from an energized power line.
- Part 10, *Lifting and Digging Equipment*, Rule 1023 (a) (4) – Improper storage of materials under an overhead power line.

CASE SUMMARIES

LABORER – STRUCK-BY FATALITY

In September of 2008, a 29-year-old laborer was killed when a shoring tower collapsed on top of him, during dismantling of the shoring tower. The shoring tower was being used to hold up a section of bridge under construction. Proper procedures were not used to dismantle the tower.

MIOSHA violations:

- Part 1, *General Rules*, Rule 114(2) – The employer did not maintain an Accident Prevention Program.
- Part 26, *Steel Erection*, Rule 2614(1) – Not maintaining structural stability during steel erection activities.
- Part 11, *Recordkeeping*, Rule 1143 – Not recording on the Injury & Illness log.

Process Safety Management of Highly Hazardous Chemicals

By: Michael T. Mason, GISHD Safety and Health Manager

The MIOSHA Chemical Compliance Program has been inspecting facilities affected by the *Process Safety Management (PSM) of Highly Hazardous Chemicals* regulation since 1992, when it went into effect.

As a direct result of these PSM inspections, many employers have switched to less hazardous chemicals in their processes or have eliminated their highly hazardous chemicals altogether.

For example, many water and wastewater treatment plants that have historically treated their water and wastewater with liquid chlorine, have switched to a 15 percent solution of sodium hypochlorite (bleach). Liquid chlorine is covered by the PSM regulation but sodium hypochlorite is not. Sodium hypochlorite is not a highly hazardous chemical, as defined by the PSM regulation.

Reducing Employee Exposure

To make their workplaces safer and to eliminate the need to comply with the PSM regulation, many employers have reduced the amount of highly hazardous chemicals they use.

A few examples are listed below:

- Sugar beet processing facilities and other employers have reduced the quantities of the highly hazardous chemical liquid sulfur dioxide they use in their processes. Employers are not covered by the PSM regulation if they use less than 1,000 pounds of liquid sulfur dioxide in a process.

- Employers utilizing anhydrous ammonia for refrigeration have reduced the amount of this highly hazardous chemical in their systems. If a refrigeration system uses less than 10,000 pounds of anhydrous ammonia, it is not covered by the PSM regulation.

- Employers have reduced the amount of formaldehyde in the solutions they use. A solution of formaldehyde that is less than 37 percent is not considered highly hazardous and is not covered by the PSM regulation.

When it comes to reducing employee exposure to highly hazardous chemicals, the Chemical Compliance Program continues to be an effective enforcement program.



A 22-ton chlorine tank truck at an unloading station.

Adrian Rocskay, Ph.D., CIH
Director, General Industry
Safety & Health Division
517.322.1831

High-Hazard Industry Focus

By: Sundari Murthy, GISHD Supervisor

Recyclable Material Merchant Wholesalers (NA-ICS 423930) is one of the 13 high-hazard industries the General Industry Safety and Health Division (GISHD) has targeted for enforcement during 2009-2013.

This is the second article on the 13 high-hazard targeted industries. The first covered the beverage and tobacco product manufacturing industry.

The Recycling Industry

The recycling industry includes establishments primarily engaged in the merchant wholesale distribution of automotive scrap, industrial scrap, and other recyclable materials. Included in this industry are auto wreckers primarily engaging in dismantling motor vehicles for the purpose of wholesaling scrap.

GISHD targeted this industry because of a high injury and illness rate. By focusing on the hazards causing the most injuries and illnesses, GISHD's aim is to reduce the rate in this industry by 20 percent by 2013.

The nonfatal injury and illness incidence rate among private industry employers in 2007 was 4.9 cases per 100 workers. The BLS industry rate for the recycling sector was 7.9.

Focused Inspections

Strains and sprains account for most of the rate for this industry. In addition to these ergonomic issues, MIOSHA will evaluate hazards associated with the following standards:

- Air Contaminants (Part 301 and other expanded standards),
- Control of Hazardous Energy Sources (Part 85, Lockout/Tagout),
- Powered Industrial Trucks (Part 21), and
- Welding and Cutting (Parts 12 and 529).

At a recent MIOSHA inspection of a recycling facility, GISHD identified employee over exposures to air contaminants such as lead and cadmium. A review of the company's lead and cadmium program identified violations pertaining to:

- Use of respirators,
- Employees washing hands before eating and drinking,
- Training employees on lead and cadmium,
- Use of clean change rooms,
- Employees showering at the end of the shift.

Employers in this industry are encouraged to contact the CET Division at 517.322.1809 for proactive consultation, education and training services.



Industrial scrap metal facility.

Adrian Rocskay – New GISHD Director



Adrian Rocskay was recently appointed the new Director of the General Industry Safety and Health Division (GISHD). Adrian has 17 years experience with the MIOSHA program, as an industrial hygienist, district supervisor, and safety and health manager.

He has more than 11 years of experience in management positions in GISHD and the former Occupational Health Division. He was a valuable contributor in establishing policy for the GISHD when two divisions merged in 2002.

Adrian holds a B.S. in Biological Sciences from the University of New Orleans, an M.S. from Michigan State University, and a Ph.D. in Industrial Health from the University of Michigan.

The GISHD is responsible for the enforcement of safety and health standards in general industry workplaces covered by MIOSHA, and for administering the Employee Discrimination Section.

"I believe strongly in MIOSHA's mission of protecting employee safety and health," said Rocskay. "GISHD is dedicated to further decreasing the number of fatalities, injuries and illnesses in Michigan."

CASE SUMMARIES

MAINTENANCE – FALL FATALITY

In August of 2008, a heating and air conditioning technician was assigned to repair an air conditioning unit at a general merchandise store. He needed to access the roof and used an extension ladder. He climbed the extension ladder with a garden hose in his hands. He climbed approximately 15 feet when the ladder slid sideways against the side of the building. The deceased fell from the ladder, striking his head on the ground. He died a day later from the injuries sustained from his fall.

MIOSHA violation:

- Part 4 – *Portable Ladders*, Rule 447 (1) – Failed to place a ladder so as to prevent slipping or it shall be lashed or held in position.

TREE TRIMMER - FALL FATALITY

In July of 2008, a homeowner requested a tree trimming firm to remove a 90-foot tree from their yard. The deceased used an aerial truck to raise himself to the top of the tree to top it out. The deceased left the bucket of the aerial lift and secured himself in the tree. While in the process of cutting the tree top, the tree broke off and fell to the ground with the deceased, which resulted in his death.

MIOSHA violations:

- Part 53, *Tree Trimming and Removal*, Rule 5334 (1) – Failed to use equipment to lower branches and limbs if the tree cannot stand the strain.
- OSH Part 11, *Recordkeeping*, Rule 1139 (1) – Failed to report a work-related fatality within the required 8-hour time limit.

Connie O'Neill, Director Consultation Education & Training (CET) Division 517.322.1809

Why Develop a Safety & Health System?

By: Connie O'Neill, CET Director

Over the last 10 years we've seen a transition from a traditional approach of managing safety and health activities through a "safety program" to implementing a safety and health management system (SHMS).

Program and System Differences

Safety programs generally have a number of independent program functions that stand alone. In many companies the safety program is not viewed as a management function, but as an activity managed by a safety director.

Safety program elements are related to managing compliance and regulatory issues such as: lockout, confined space, and hearing conservation. Safety system elements are organizational factors such as: how the company operates, how it treats employees, and what it values.

A safety and health management system is a comprehensive approach that integrates occupational safety and health programs, policies, and objectives with other organizational policies and procedures. An SHMS helps ensure that necessary safety and health goals and objectives are aligned with other business processes.

The benefits of a system include:

- Safety and health policies and goals are clearly communicated.
- Responsibilities for implementing the system are understood and accepted.
- Long-term solutions are implemented, rather than one-time fixes.
- Evaluation of results ensure continual improvement.
- An effective system supports the organization's philosophy.
- Managers/employees committed to the SHMS will support it with their daily actions, and safety excellence will follow.

Models for Developing an SHMS

The *Michigan Voluntary Protection Program (MVPP)* and

the *Michigan Safety and Health Achievement Recognition Program (MSHARP)* provide models for implementing an SHMS.

These models are characterized by five primary elements:

- Management Commitment and Planning,
- Employee Involvement,
- Workplace Analysis,
- Hazard Prevention & Control,
- Safety and Health Training.

Companies that achieve this MIOSHA recognition have injury and illness rates 50 percent below their industry average and reap many other "bottom line" benefits.

Below are some strategies for getting started:

- The MVPP application is available on line and is a good tool to assess your current system.
- CET Safety and Health Consultants are available to help you develop an SHMS.
- MVPP companies can provide SHMS mentoring.
- If your injury and illness rates are higher, the Michigan Challenge Program is available, with a deferral from MIOSHA programmed inspections for six months.

Several MTI courses provide in-depth SHMS information.

For more information, visit our website at www.michigan.gov/cet or call the CET Division at 517.322.1809.



Michigan Packaging (MSHARP) Safety Committee members Chris Zimmerman and Dan Zachar inspect a BHS Module Facer.

MIOSHA News Quiz

Topic: Bloodborne Infectious Diseases

The quiz is written by MIOSHA safety and health professionals and topics cover a wide range of safety and health issues. The quiz is available at www.michigan.gov/mioshanewsquiz.

MIOSHA Residential Builder Courses

By: Connie O'Neill, CET Director

On December 20, 2007, Governor Granholm signed legislation that requires preclosure education and continuing competency for Residential Builders and Maintenance and Alteration (M&A) Contractors. Preclosure rules took effect June 1, 2008. Continuing competency rules took effect January 1, 2009.

If you are applying for a residential builder or maintenance and alteration (M&A) contractor license, you must complete **60 hours of approved preclosure education courses**. All courses are approved by the DELEG Bureau of Commercial Services (BCS). For more specific information, please visit www.michigan.gov/builders.

Preclosure MIOSHA Requirements

Of the 60 hours required, **at least six hours must be completed in Construction Safety Standards promulgated under MIOSHA**. A series of CET seminars have been approved by BCS for preclosure requirements. All of the approved MIOSHA courses are MIOSHA Training Institute (MTI) courses.

Upon successful completion of a course, participants will be provided a certificate with the course approval number. Participants will also be entered into the MTI database for Level One MTI certification. These courses qualify for the MTI scholarship program.

Below are the approved MIOSHA courses for preclosure:

- MIOSHA Construction 10-Hour;
- MIOSHA Construction - Part 45, Fall Protection;
- Electricity: The Invisible Killer;
- Excavations: The Grave Danger;
- Asbestos and Lead Awareness;
- Health Hazards in Construction;
- When MIOSHA Enforcement Visits;
- Supervisor's Role in Safety and Health;
- Blueprint for a Safety and Health Management System;
- MIOSHA Recordkeeping and Cost of Injuries.

The CET training calendar provides information on dates, locations and registration for all seminars. For more information, go to www.michigan.gov/mioshatraining or call the CET Division at 517.322.1809.



Safety and Health Publications – Add Value

By: Howard Simmons, CET Senior Onsite Safety Consultant

During times of layoffs, cutbacks, downsizing and tight budgets, we all seek ways to minimize costs. Below are some **value-added** education and training materials to help you develop a safety and health management system and comply with MIOSHA standards.

Sample Written Programs

Sample written programs can help you get started in writing a written program required by specific MIOSHA standards. You will need to customize the sample written programs to fit your specific operation and needs.

Below are a few of the programs available:

- Construction Safety (Sample Accident Prevention Plan) SP #1;
- Safety & Health Management System (Sample written pgm.) SP #2;
- Right to Know Hazard Communication Compliance Guide SP #22;
- Lockout/Tagout Compliance Guide SP #27;
- Confined Space Entry Training and Workshop SP #28;
- Respiratory Protection (Sample written plan) #5730.

Guidelines

The publications below provide in-depth information on specific safety and health topics. They contain information on how to conduct activities, establish programs, and in some cases provide a summary of specific compliance requirements, and sample forms:

- Job Safety Analysis SP #32;
- Personal Protective Equipment for General Industry SP #16;
- MIOSHA Construction Standards Training Requirements SP #3;
- Part 11.Injury & Illness Recordkeeping Book SP #33.

All of these materials plus many more can be downloaded from the MIOSHA website at www.michigan.gov/cet.

Ask MIOSHA

Question: "I was wondering if it is a requirement or suggestion for steel toed shoes to be certified? Also I am trying to understand whether the ANSI Z41-1991 is equivalent to ASTM?"

Answer: If foot/toe hazards exist or where required by a specific safety standard, certified safety toed footwear is a requirement.

ANSI Z41 was replaced by two new *American Society of Testing Material (ASTM) International Standards* on March 1, 2005. The new ASTM standards are *F2412-05 Standard Test Methods for Foot Protection* and *F2413-05 Standard Specification for Performance Requirements for Foot Protection*.

ASTM F2413-05: Addresses minimum requirements for the manufacturing, performance, testing and classifying of protective footwear.

One shoe of each pair must be marked with the specific part of the standard that it meets. For example:

Line 1 – ASTM F2413-05: Shows the footwear meets the performance requirements of ASTM F 2413.

Line 2– M I/75/C/75/Mt75: Indicates the intended gender (M-Male or F-Female), impact resistance (I), the impact resistance rating (75 or 50 which correlate to 2,500 pounds and 1,750 pounds of compression respectively). The metatarsal designation (Mt) and rating (75 or 50 foot pounds) are also identified.

Lines 3 & 4 – CD, SD, EH, PR, CS, DI: Classifies footwear that meets other specific types of requirements including: conductive (CD) properties, static electricity reduction (SD), electrical insulation properties (EH), puncture resistance (PR), chain saw cut resistance (CS) and dielectric insulation (DI), if applicable. Chain saw cut resistant (CS) footwear must also meet ASTM F1818. Dielectric insulation (DI) footwear must be tested according to ASTM F1116 and meet ASTM F1117.

MIOSHA *Personal Protective Equipment* rules for General Industry (Part 33, Rule 3383 (1)) and Construction Safety (Part 6, Rule 526(1)) still reference the ANSI Z41-1991 marking. We understand it is getting hard to find shoes with this marking. Although we have not had a standard change in Michigan, the ASTM markings are accepted by the enforcement divisions as recognized approved protective footwear.

www.michigan.gov/askmiosha

Variations

Variations from MIOSHA standards must be made available to the public in accordance with Part 12, Variations (R408.22201 to 408.22251). MIOSHA variations are published in the MIOSHA News website: www.michigan.gov/mioshavariations

**Ken Pung, Acting Director
Appeals Division
517.322.1297**

The MIOSHA Appeals Division oversees the settlement of cases where citation(s) have been issued.

**John Peck, Director
Management & Technical
Services Division
517.322.1851**

Standards Update

Governor Granholm appointed **Tapan K. Datta, Ph.D., P.E.**, of Bloomfield Hills, Professor, Department of Civil & Environmental Engineering, Wayne State University, to the Construction Safety Standards Commission to represent public employees actively engaged in construction operations in Michigan.

Status of Michigan Standards Promulgation

General Industry Safety Standards Commission

- GI Part 17, *Refuse Unit Packers*, the commission approved revisions to be sent to the Governor, with public hearings to be scheduled.
- GI Part 33, *Personal Protective Equipment*, the commission approved revisions to be sent to the Governor, with public hearings to be scheduled.
- GI Part 74, *Fire Fighting*, an advisory committee was appointed to update this standard.

Construction Safety Standards Commission

- CS Part 1, *General Rules*, an advisory committee reported their recommendations to the commission on September 23.
- CS Part 2, *Masonry Wall Bracing*, a public hearing was held August 19.
- CS Part 10, *Lifting and Digging Equipment*, an advisory committee reported their recommendations regarding crane operator certification.
- CS Part 12, *Scaffolds and Scaffold Platforms*, an advisory committee is reviewing rules regarding rough terrain forklift truck scaffolds, portable ladders, electrical lines and stilts.

Occupational Health Standards Commission

- OH Part 301, *Air Contaminants in General Industry*, and OH Part 601, *Air Contaminants in Construction*, draft language has been prepared to add air contaminant limits for hexavalent chromium (Cr6+) and diisocyanates, to change air contaminant limits for ammonia and coal dust, and update standard references. A public hearing was held September 30.
- OH Part 316, *Diisocyanates*, a public hearing was held September 30.
- OH Part 554, *Bloodborne Infectious Diseases*, and OH Part 433, *Personal Protective Equipment*, the commission accepted proposed revisions from the Latex Advisory Committee, details are in the Michigan Register and public hearings will be scheduled.

Joint Standards

- *Ergonomics*, DELEG posted an "Invitation to Bid" for a third party to prepare portions of the Regulatory Impact Statement (RIS) for the proposed standard. The Ad Board approved Ruth Ruttenberg and Associates (RRA) to prepare the information. The RIS must be done before the draft rules can be considered.

2007 Program-Related Fatalities Publication

Workplace fatalities have steadily declined in Michigan from a high of 115, when they were first recorded in 1977. As the cover story indicated, one worker death is too many.

During 2008 in Michigan, there were 37 workplace fatalities that met the "program-related" criteria. There were 31 fatalities in 2007 and 52 in 2006.

The MTS Division has recently released the "2007 Program-Related Fatalities" publication.

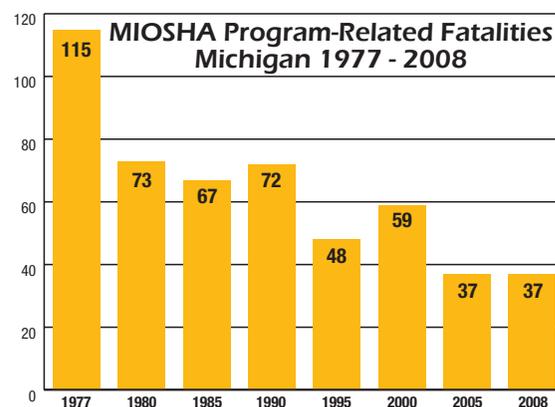
The purpose of the report is to assist in the continuing effort of preventing and reducing fatal cases.

Only fatal workplace cases that are defined as being in violation of a MIOSHA standard meet the "program-related" criteria. Therefore, the data does not include fatalities resulting from heart attacks, suicides, highway personal motor vehicle trips, and aircraft accidents.

This 2007 report provides an overview of how the fatalities were distributed across:

- Industry groups,
 - Occupations,
 - Source of injury or illness,
 - Events or exposures,
 - Parts of body affected, and
 - Nature of injury or illness.
- Frequencies are also provided by:
- Age group,
 - Gender,
 - Month of occurrence, and
 - Counties of occurrence.

The full report is available on our website at www.michigan.gov/miosha. Click on the "Recordkeeping & Statistics" link, and then on "Program-Related Fatality Data."



Blueprint for a Safety and Health Management System

At a recent “*Blueprint for a Safety and Health Management System*” course, the following comment was included on the course evaluations: “One of the best MIOSHA programs I have attended.”

Continuous Improvement Tools

Did you know that there is a direct relationship between effective management and increased productivity, consistent higher quality, and lower workplace injury and illness rates?

Continuous improvement tools are highlighted in this MTI seminar to help you achieve increased worker protection, lower work-comp costs, enhanced productivity, and improved employee morale.

Proactive activities and accountability are emphasized as a means of providing an employer with statistically significant metrics for measuring safety success. Studies show that high levels of management commitment and employee involvement lead to continuous improvement of all workplace systems, including the safety and health management system.

Safety Culture Elements

The following are the key learning objectives for this course.

- Identify a safety and health management system and how it inter-relates with other workplace systems.
- Provide an overview of the five elements of MIOSHA’s model and how they relate to the Michigan Voluntary Protection Program...the best of the best.
- Identify the benefits of each element and key

processes in each element.

This program is a must for anyone concerned about health and safety on the job including:

- Managers concerned about liability and workers’ compensation costs.
- Employees with safety and health responsibilities who want to learn proper techniques for protecting their safety and health at work.
- Business owners who want to develop a safety culture that enhances their bottom line.

This course is required for MTI Level One certification. For course information for FY 2010, go to the MTI website, www.michigan.gov/mti.

\$18,000 for MTI Scholarships

What?	Scholarships to attend MTI courses
Who?	All past, present and new students
How much?	Employed students – half the course cost Unemployed students - \$20.00 data fee
How many?	There is no limit
When?	All MTI courses starting October 1, 2009
Where?	All statewide locations
Contact?	www.michigan.gov/mti Phone: 517.322.1809



Director: Douglas J. Kalinowski
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MIOSHA Hotline: 800.866.4674
Fatality Hotline: 800.858.0397
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Website: www.michigan.gov/miosha

The Mission of the MIOSHA Program is: To Help Assure the Safety and Health of Michigan Workers.

The MIOSHA News is a publication of the MIOSHA program. Its purpose is to educate Michigan employers and employees about workplace safety and health and we encourage reprinting.

DELEG is an equal opportunity employer/program. Auxiliary aids, services and other reasonable accommodations are available upon request to individuals with disabilities.

Website: www.michigan.gov/deleg

(25,000 copies printed at \$3,803 or \$0.15 per copy.)

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