Acoustical Association Ontario

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Provincial in scope ...

Provincial in outlook

Executive Director's Report

Summer Heat is Coming

Summer weather has just started and we have been very fortunate that there have only been a few hot, humid days so far. But that sweltering heat will soon be upon us. Over the past ten years, the United States has experienced a yearly average of 36 deaths and 2,810 heat related illnesses.

The drywall and finishing trades are not exempt from these heat related illnesses. In 2014, fr example, a worker was performing drywall tasks that resulted in a heat fatality. Another employee collapsed after performing some finishing activities. These are just a few examples of heat cases in construction. We all probably know of someone who fainted as a result of heat stress. The consequences can be even more serious – what if the worker was climbing a ladder and fainted?

Employers need to raise heat stress awareness each and every summer. Under the Occupational Health and Safety Act (OHSA), there is a general duty placed upon employers to take every reasonable precaution to protect the health and safety of its employees. This includes training of workers about the signs and symptoms of heat stress, what steps that they can take to prevent heat stress and to develop policies and procedures to protect workers.

What is Heat Stress?

Body temperature is normally maintained between 36 and 38 degrees Celsius. As the environment warms-up, the body tends to warm-up as well. The body's internal "thermostat" maintains a constant inner body temperature by pumping more blood to the skin and by increasing the sweat production. In this way, the body increases the rate of heat loss to balance the heat burden. In a very hot environment, the rate of "heat gain" is more than the rate of "heat loss" and the body temperature begins to rise. A rise in the body's temperature results in heat illnesses. Exposure to excessive temperature and humidity can cause the following illnesses:

Heat rashes are tiny red spots on the skin which cause a prickling sensation during heat exposure. The spots are the result of inflammation caused when the ducts of sweat glands become plugged.

Heat cramps are sharp pains in the muscles that may occur alone or be combined with one of the other heat stress disorders. The cause is salt imbalance resulting from the failure to replace salt lost with sweat. Cramps most often occur when people drink large amounts of water without sufficient salt (electrolyte) replacement. Do not give salt tablets. Salt in our diets is usually enough but there are many products available such as sports juices.

Heat exhaustion is caused by loss of water and salt through excessive sweating. Signs and symptoms of heat exhaustion include: heavy sweating, weakness, dizziness, visual disturbances, intense thirst, nausea, headache, vomiting, diarrhea, muscle cramps, breathlessness, palpitations, tingling and numbness of the hands and feet. Recovery occurs after resting in a cool area and consuming small amounts of cool drinks frequently (e.g., water, clear juice, or a sports drink). It can take 2 to 3 days for the worker to completely recover, just like the flu.

Heat syncope (fainting) is heat-induced dizziness and fainting induced by temporarily insufficient flow of blood to the brain while a person is standing. It occurs mostly among un-acclimatized people and caused by the loss of body fluids through sweating, and by lowered blood pressure due to pooling of blood in

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the legs. Recovery is rapid after rest in a cool area and drinking small amounts of cool water. Remember, if someone faints (loss of consciousness), it is a critical injury and must be reported to the MOL immediately.

Heat stroke is the most serious type of heat illness. Signs of heat stroke include body temperature often greater than 41°C (which is not determined by any sign), complete or partial loss of consciousness, confusion, irrational behavior, convulsions. Sweating may stop and the skin is hot and dry. Heat stroke requires immediate first aid and medical attention. Delayed treatment may result in death. Remove excess clothing, cool the worker with water while waiting for medical treatment to arrive.

How Do We Determine Heat Stress Risk?

The method most widely accepted in all industries is to determine the wet bulb globe temperature (WBGT) which involves evaluation of the thermal environment (air temperature, radiant heat - heat from hot objects such as molten furnaces, type of work and type of clothing).This method uses specific instrumentation to determine the risk level. A better method for the construction industry, much like that for the general public, is to use humidex measurements since there is usually no radiant heat, it is faster and an index everyone understands.

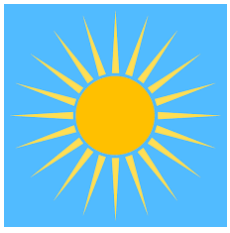
Humidex units are inexpensive and simple to use.

Some employers use the humidex reading to set in motion defined procedures. For example, employers may use set values to implement, more rest breaks or work stoppages to ensure the health and safety of their workers. They make use of humidex meters to monitor, in real time, conditions at their projects. While other employers, with the use of their smart phones or computers, utilize Environment Canada's humidex readings to determine the conditions in the areas they are working. See http://weather.gc.ca/forecast/canada/index_e.html?id=ON

How Can We Protect Against Heat Stress?

- Employers can help protect workers by:
- Acclimatizing Workers by gradually increasing, over a 5 to 1o day period, demanding activities that expose them to high levels of heat,
- Providing cool drinking water, in close proximity to the workers and have employees drink small amounts; every 15 to 30 minutes depending on activity – this is probably one of the most important ways to prevent heat stress,
- Scheduling earlier work starts, if possible, to avoid high afternoon temperatures,
- Scheduling physically demanding work earlier in the day,
- Ensuring workers wear light, breathable clothing,
- Implementing rests breaks in cool shady areas or, if possible, providing your workers with fans.

For this summer, remember WRS.



WATER

REST

SHADE

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MINISTRY OF LABOUR (MOL) UPDATE

Young Workers

The Ontario Ministry of Labour (MOL) advises that as the summer job season gears up more young people will be employed in Ontario. The MOL is reminding employers and their supervisors that young workers have rights and responsibilities under the laws just like all other workers. More than 1.5 million young people, between the ages of 15 to 24, work across Ontario and every year more than 6,000 are injured, seriously enough to need time off work. Under the law, all workers, including young workers, have the right to:

- Refuse unsafe work,
- Know about hazards in the workplace and how to protect their health and safety,
- Participate in resolving workplace health and safety concerns.

Quick Facts

Every summer, the Ministry of Labour conducts a young worker health and safety blitz to make sure all workers know their rights – this year's four-month blitz began in May.

Between 2009 and 2013 thirty (30) young workers aged 15 to 24 died in work-related incidents and more than 30,000 received injuries resulting in lost time at work. **Fact** - New and young workers are three times more likely to be injured during their first month of work than at any other time.

Fine to Employer- Fastening Gun Fires, Injures Worker, $50,000

Excerpt from MOL Court Bulletins June 26, 2015

A company has been fined $50,000 after a worker was injured by a fastening gun. As explosive actuated fastening tools are common in our industry, this is an important event to review, not just because of the size of the fine, but that training and review of power tool manuals cannot be taken for granted.

The worker was using a fastening gun to complete work and was carrying the gun down a set of stairs when the gun fired a steel pin into the worker's body. The worker was taken to the hospital for medical treatment.

Following a trial, the court found the company guilty, under the Occupational Health and Safety Act (OHSA), for failing to ensure a worker was adequately trained in the use of an explosive actuated fastening tool, AND failing to ensure the tool was used in accordance with the operating manual issued by the manufacturer. A fine of $30,000 was imposed for the first offence and a fine of $20,000 was imposed for the other.

The lesson to be learned here is that manufacturers' operating manuals need to be reviewed, probably best by supervised demonstration and that adequate training is required to operate an explosive actuated fastening tool. All reviews and training must be documented and up to date. The best approach is to require employees to carry training certificates so that the employer can review and determine whether or not it is adequate.

If you have any questions, please call me at 519-671-5930.

Thank you.

Paul Gunning

Executive Director

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Remember to mark this date!

AAO's AGM September 17 to September 20, 2015
Prince of Wales Niagara-on-the-Lake

The Mathews Dinsdale Minute

This issue of the Mathews Dinsdale Minute will be very brief. In January, we described to you the new Ministry of Labour requirements and standards for the training required to be given to employees working at heights in the construction industry. These were announced on December 9, 2014 and they officially became effective on April 1, 2015.

To recap, the new training must include training on:

- rights and responsibilities when working at heights;
- hazard identification;
- ladder safety; and
- proper use of personal protection equipment.

These new training standards need to be covered with employees. Please note that workers who have been previously trained and have long since secured certification on fall arrest requirements will need to receive training under the new program by no later than April 1, 2017.

Ultimately, it will be important to ensure that employees, as they come into your organization, have received training on these standards and are compliant with the Ministry requirements. Further, while April 1, 2017 seems far away, starting to look at ensuring existing employees have the training long before the deadline is a good idea. We do expect the Ministry of Labour to enforce these requirements with some vigour.

mathews dinsdale *Workplace Law Spoken Here*