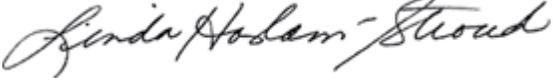


To: Local Coordinators, Bargaining Unit Presidents, Health and Safety Network Leads, and Joint Health and Safety Committee Members from the Executive Booklet

From: Diane Parker, Vice-President Region 1, Occupational Health and Safety Portfolio



Date: April 20, 2012

Re: **Venting Hazards at Magnetic Resonance Imaging (MRI) Facilities**

C: Board of Directors, District Service Teams, Provincial Services Team

In July 2010, ONA issued information and advice to leaders about MRI hazards (attached). Recently members advised that Ministry of Labour (MOL) inspectors have been visiting workplaces to inspect MRI “emergency exhaust systems” for adequacy with respect to “quench” events.

There are several potential hazards associated with the magnets and the cryogenic liquids used with MRI equipment. A “quench” event may occur with an intentional or unintentional shut down of an MRI magnet, and involves rapid boiling of liquid helium from the equipment.

The February 2007 *Report of the Diagnostic Imaging Safety Committee for MRI* indicated on page 47 that “A magnet quench will cause hundreds of litres of liquid helium to boil off in a few seconds. The helium gas should go directly into the quench exhaust line during the quench but if the exhaust system malfunctions helium gas could enter the scanner room. This could reduce the amount of oxygen in the room to dangerously low levels ... The helium gas is also extremely cold and the danger of frostbite exists if enough helium gas has accumulated in the scanner room.”

The report is posted on the Ministry of Health and Long-Term Care (MOHLTC) website at: http://www.health.gov.on.ca/english/public/pub/ministry_reports/disc_ct_mri/mri_report.pdf)

While there are currently no specific regulations that address MRI use in Ontario, there are several sources that set out the hazards and best practices for dealing with them. (See attached source list for a sampling).

We understand MOL inspectors have issued orders to employers about the safety of MRI equipment and the need to train workers about MRI health and safety measures and procedures. (For a sample, visit the “Health & Safety” section of the ONA website, click on “Enforcement”, then hit the “Ministry of Labour Orders” link)

Some of ONA's Joint Health and Safety Committee (JHSC) members have indicated they struggle with being able to approve written measures and procedures and training content for workers.

According to Section 59 (1) of the *Occupational Health and Safety Act*, if an employer believes it has achieved compliance with an order within three days of its issuance,

"...the constructor or employer shall submit to the Ministry a notice of compliance.

- (2) The notice shall be signed by the constructor or employer and shall be accompanied by,
- (a) a statement of agreement or disagreement with the contents of the notice, signed by a member of the committee representing workers or by a health and safety representative, as the case may be; or
 - (b) a statement that the member or representative has declined to sign the statement referred to in clause (a).

It is important for members to understand that the JHSC is an advisory body of worker and employer representatives trained to recognize and deal with health and safety issues and risks, and to make recommendations to the employer to resolve concerns and improve workplace safety.

However, committee members are not expected to be, and cannot be, experts in every area of a workplace. The JHSC can recommend to employers that MRI suppliers and other experts be called upon to provide and recommend appropriate measures and training. And, when the MOL issues orders about such complex issues as MRI safety, unless a worker member of the committee has particular expertise and/or evidence of compliance, the member is not required to sign an employer's notice of compliance.

In many cases the determination of compliance is better left to the MOL.

If your workplace has MRI facilities and your JHSC has concerns about compliance with law and/or orders, please contact your ONA Labour Relations Officer (LRO) for assistance.