To: Local Coordinators and Bargaining Unit Presidents

From: Karen MacDonald, VP Region 1, Occupational Health and Safety Portfolio

Date: July 5, 2007

Re: Direction re: who to contact for portable x-ray safety

C: Board of Directors, District Service Teams, Provincial Services Team, Health and Safety Network Leads, and Joint Health and Safety Committee (JHSC) members from the Executive Booklet

Some ONA members have raised questions about the protection required when using portable x-ray machines in such areas as PACU, NICU and Pediatrics. We have received anecdotal reports that some members are not given lead gloves while holding infants during irradiation. Members have asked what they should do and who they should contact if they have any health and safety concerns related to portable x-rays.

Sorting out who to contact can appear challenging as there are several branches of government and several pieces of legislation governing different aspects of x-rays in health care facilities.

Ministry of Labour (MOL) and worker safety
The MOL regulates health care worker radiation safety primarily using two regulations made under the Occupational Health and Safety Act (OHSA):

- The primary legislation for health care workers with health and safety concerns about portable x-ray machines is the Regulation for Health Care and Residential Facilities. It says: "15. (1) A worker who supports, positions or restrains a patient or resident during x-ray irradiation of the patient or resident shall be provided with and wear a protective apron and protective gloves and, where appropriate, a protective collar. (2) The equipment provided under subsection (1) shall have a lead equivalence of at least 0.5 millimetres. O. Reg. 67/93, s. 15."

The x-ray safety regulation requires an employer to appoint a knowledgeable person to ensure the safe use of x-rays in the workplace (See Section 8). The regulation also requires dosimeters for workers who qualify as "x-ray workers" under the regulation (not usually nursing staff). The only reference to protective equipment in this regulation is for gloves and apron with an x-ray machine when restraining or supporting an animal by hand.
Ministry of Health and Long Term Care (MOHLTC) and machine registration, operation and patient safety

The provincial MOHLTC regulates the registration, installation and operation of x-ray machines under the *Healing Arts Radiation Protection Act* and the *X-ray Safety Code* regulation under that Act. The focus of this ministry and this legislation is the equipment and patient safety.

- This legislation requires the owner of an x-ray machine to appoint a “radiation protection officer” to ensure that operators are qualified and to ensure that equipment is installed and operated properly.
- Among her/his duties the radiation protection officer is responsible to:
  “ensure that protective accessories of at least 0.5 millimetres lead equivalent at 150 kilovolts peak are available for use by persons who may receive exposure to x-rays in the facility” (sec. 8 (3) X-ray Safety Code).

**Occupational health and safety concerns**

If a worker has any health and safety concerns related to portable x-rays (e.g. provision of apron and gloves when holding infants during irradiation, weight of apron when needing accommodation for disability, etc.) s/he should use the workplace Internal Responsibility System (IRS) to resolve the concern, i.e.:

1. Raise the concern with her/his supervisor who should be urged to consult the person appointed under the *X-ray Safety Code* regulation to oversee x-ray worker safety, and/or the “radiation protection officer” (*Healing Arts Radiation Protection Act*).

2. If the concern is not resolved, raise the unresolved issue with a worker member of the Joint Health and Safety Committee (JHSC).

The JHSC member should:

1. Caucus with other worker members to discuss the issue and develop recommendations.

2. Table written recommendation(s) with the employer (under the *OHSA*, the employer has 21 days to respond in writing to written recommendations).

3. If the matter is not resolved or if the hazard is imminent, call the MOL with a “formal union complaint.” Ask to involve the MOL Radiation Protection Service. Also, contact the Bargaining Unit President/Labour Relations Officer (LRO) for advice regarding other responses such as filing grievances.

The MOL and MOHLTC urge workplace parties to try to resolve issues through your IRS, keeping in mind that urgent hazards may require urgent attention. In that case, the concerned worker and/or the union may consider calling the MOL immediately with a “formal union complaint”, and/or if the worker has reason to believe s/he (or another worker) is in danger, s/he may wish to exercise her/his right under the *OHSA* to refuse unsafe work.
**Residual questions**
If after trying to resolve the issue through your IRS you still have questions, you can direct them to one or both of the following:

- **Worker safety:** Lothar Doehler, MOL Acting Manager, Radiation Protection Service (416) 235-5765.

- **X-ray equipment installation, operation and patient safety:** Jim Beaton, MOHLTC Manager, X-ray Inspection Service (416) 327-7936.

Remember, nuclear medicine involving things like brachytherapy, is federally regulated by the Nuclear Safety Commission using the Radiation Protection regulation under the *Nuclear Safety Act*. Health and safety measures include protective bunkers. After working through the IRS, if you still have questions about nuclear safety for health care workers, contact Kalnita Otmurthy at (899) 668-5284.