

Ontario Association of Medical Radiation Technologists (OAMRT) Enhanced Practice Certificate

Intravenous Contrast Injection for Medical Radiation Technologists & Related Allied Health Professionals

Course Description

The didactic component of this course is delivered online and can be completed at the student's own pace (from any location), prior to the practical session. The clinical practicum consists of a hands-on, one-day workshop at a centralized host site or alternate. **

**** The OAMRT has partnered with several clinical facilities across the province to offer the clinical practicum at various times throughout the year. Alternatively, course applicants can arrange to hold the clinical practicum session at their facility with a minimum enrollment of six participants.**

This course summarizes the key concepts around the chemical and physical properties of commonly used intravenous contrast media within imaging and more recently therapy departments, including those used in conjunction with Radiographic, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) procedures. Actions, reactions and pharmacodynamics of contrast media, emergency measures and medications required to deal with adverse reactions, are also studied.

Venous identification and insertion techniques are a vital part of the hands-on portion of the course. Proper aseptic technique and complications of insertions are dealt with. The practical portion of the course includes the equipment required and procedure to follow for proper insertion of both the venous catheter and the winged infusion set. Some time is also invested on setting up intravenous solutions, monitoring the administration of IV solutions, and injecting into pre-existing lines. Safety aspects relating to needle stick injury to the practitioner is also included.

Course Criteria

Assumed prerequisite knowledge, skills and professional attributes:

The Technologist or other approved Allied Health Professional

1. Has completed an accredited Medical Radiation Technology or other allied health program and is certified to practice in Canada;
2. Is employed in a Diagnostic Imaging or Radiation Therapy department;
3. Recognizes patients as unique individuals, treating them with dignity and respect;
4. Fosters inter-professional collaboration with other allied healthcare professionals in providing client services;
5. Practices according to the legislation and regulations governing the profession of Medical Radiation Technology and/or Regulated Health Professionals; or other, such as guidelines and best practices for the occupation of the practitioner;
6. Exercises knowledge, skill, and judgment at all times;
7. Maintains personal Professional Liability Insurance (PLI).

To meet the competencies set by the OAMRT for the Enhanced Practice Certificate in Intravenous Contrast Injection, the student:

1. Must complete the theory component of the Intravenous Contrast Injection course (online);
2. Must complete an online examination and receive a passing grade of 75%;
3. Must attend the clinical practicum for Intravenous Contrast Injection course (one-day practical session) and pass a skills' evaluation;
4. Should successfully complete a minimum of 20 observed intravenous injections within their facility after the course is completed (see recommended guidelines in the OAMRT Competency Profile for Intravenous Injection of Contrast Media).

About the Author

Evelyn A. Kelly



Evelyn Kelly is the President of Ev. Kelly Services. She is a Registered Radiological Technologist, a Registered Nurse, with qualifications in Flight Nursing, and a Military Nursing Officer. She has a Bachelors degree in Anatomy and a Masters degree in Health Care Administration.

She has years of experience as faculty in the collaborative Radiation Sciences Program at the Michener Institute for Applied Health Sciences and at the University of Toronto. She was responsible for planning, developing, implementing and evaluating the Human Behaviour and Medical Ethics Courses and the Patient Care program. She also held the position of Clinical Liaison for 16 affiliated hospitals that provided clinical training for the students enrolled in the Radiation Sciences Program. Courses instructed at the University of Toronto included Osteology and Human Behaviour. She has been the recipient of the Philips Rose Bowl award on three occasions for Medical Exhibits presented at the Canadian Association of Medical Radiation Technologists (CAMRT) Annual General Conference.

Evelyn, in addition to her new role teaching this course for the OAMRT, is currently a lecturer in Contrast Media and Intravenous Injection Technique for Radiographers, Radiotherapists and MRI Technologists. She is also the Acting Chief Invigilator for the National CAMRT Examinations in Toronto.