

RADIATION SAFETY TRAINING

FOR

OCCUPATIONALLY EXPOSED RADIOLOGY PERSONNEL

- **INTRODUCTION**

- **WHAT IS RADIATION & TYPES OF RADIATION**
 - Background Radiation
 - Alpha Beta
 - Gamma
 - X-Ray Radiation
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- **SOURCES OF RADIATION**
 - X-Ray
 - Teletherapy
 - Sealed Sources
 - Radiopharmaceuticals
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- **USES OF RADIATION**
 - In-Vitro Laboratories
 - Diagnostic Nuclear Medicine
 - Therapeutic Nuclear Medicine/Brachytherapy
 - Teletherapy
 - X-Ray
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- **RADIATION PROTECTION – ALARA CONCEPT**
 - Time
 - Distance
 - Shielding

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- **CAUTION SIGNS & LABELING**
 - **Caution – Radioactive Material**
 - **Caution – Radiation Area**
 - **Caution – High Radiation Area**

- **YOUR RADIATION SAFETY OFFICER**
 - **Check with Radiation Safety Officer or the IRRP any time you have questions or concerns**
 - **Check Your “Notice To Employees” Sign**

Annual Review of Radiation Safety for Occupational Personnel

Employee Name: _____ Date of Review: _____

You are responsible for locating, understanding and reviewing the Policies and Procedures listed below. Your signature indicates that you have complied.

Employee Signature: _____

Supervisor Signature: _____

Radiation Safety Officer Signature: _____

- Familiar with applicable parts of the Ohio Administrative Code:
 - Chapters 3701:38, 3707:40, 3701:70, 3701:71
 - Chapter 3701:38-12, specifically concerning badge data
- Locate:
 - ODH "Notice to Employees" Posting
 - State of Ohio Registration
 - Posting of Certified Radiation Expert
 - Copies of Ohio Administrative Code
- Review NRC 10 CFR 19, 20,35
 - Prenatal radiation exposure instructions Reg. Guide 8.13 (For female employees)
 - Review Radiology Policy and Procedure Manual, familiar with the following safety protocols:
 - Patient Safety
 - Safety Practices in Radiology
 - Pregnancy verification
 - Radiographer's in the Surgical Suite
 - Electrical Equipment Safety / Safety Checks
 - Radiation Safety for the Patient
 - Radiation Safety for the Pregnant Worker
 - Radiation Safety for the Declared Pregnant Worker
 - Safe Operating Procedures for EMH Health Center.
 - Film Badges
 - Radiation Safety Protocols for Fluoroscopically Guided Procedures
 - Radiation Safety Protocols for Radiographic & Fluoroscopically Guided Procedures for the Pregnant Patient
 - Radiation Safety
 - Radiation Safety – Occupational / Non-Occupational Workers
 - ALARA Program
- Reading In-Service QA Manual Sections
- New employees are required to make request from previous employer regarding previous occupational radiation exposure records.

Acknowledgement of Training

Given By: _____

On: _____, I received training covering the following areas:

STATE OF OHIO

- Applicable regulations and license conditions
- Areas where radiographic equipment is used or stored
- Potential hazards associated with radiation exposure in each area where I will work.
- Appropriate radiation safety procedures
- In-house work rules or their posted location.
- My obligation to report unsafe conditions to the Radiation Safety Officer.
- The appropriate response to emergencies or unsafe conditions.
- My right to be informed of occupational radiation exposure or bioassay results.
- My right to be informed of occupational radiation regulations, licenses or license conditions that are posted or made available.
- Presence of a restricted area.
- Occurrence of radiation sources.
- Safety problems associated with exposure to sources.
- Precautions or procedures to minimize exposure.
- Reports of radiation exposure.

**RADIOLOGY PERSONNEL CHECKOFF SHEET
FOR COMPETENCY TO OPERATE DIAGNOSTIC X-RAY EQUIPMENT**

	YES	NO
<u>FAMILIARIZATION WITH EQUIPMENT</u>		
Identification of controls	_____	_____
Function of each control	_____	_____
How to use a technique chart	_____	_____
<u>RADIATION PROTECTION</u>		
Collimation	_____	_____
Filtration	_____	_____
Gonad shielding & other patient protection devices, if used	_____	_____
Restrictions of x-ray tube radiation to image receptor	_____	_____
Personnel protection	_____	_____
Grids	_____	_____
Proper use of personnel dosimetry, if required	_____	_____
Understanding units of radiation	_____	_____
<u>FILM PROCESSING</u>		
Film speed as related to patient exposure	_____	_____
Film processing parameters	_____	_____
Quality Assurance Program	_____	_____
Identification of film artifacts & corrective action, if necessary	_____	_____
Identification of adequate film exposure on the resultant radiograph and corrective actions, if necessary	_____	_____
<u>PROCEDURES</u>		
Knowledge of anatomy and physiology	_____	_____
Knowledge of positioning & radiographic demonstration of the requested anatomy with corrective actions, if necessary	_____	_____
<u>EMERGENCY PROCEDURES</u>		
Termination of exposure in event of automatic timing device failure	_____	_____
<u>CONTINUING EDUCATION</u>		
Continuing education annually to include radiation protection	_____	_____

Employee Name

Date