

GUIDANCE FOR DEVELOPING A RADIATION SAFETY PROGRAM

What do the Regulations require?

RH-1004. of the <u>Arkansas State Board of Health - Rules and Regulations for Control of Sources of</u> Ionizing Radiation states:

- a. Each licensee or registrant shall develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities or x-ray equipment use and sufficient to ensure compliance with the provisions of this Part. (See RH-1500. for recordkeeping requirements relating to these programs.)
- b. The licensee or registrant shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA).
- c. The licensee or registrant shall periodically (at least annually) review the radiation protection program content and implementation.

Where do we begin?

First of all this document should be used as guidance only.

Secondly, the intent of the regulation is to ensure that a radiation safety program is developed and maintained which will meet the needs of individual programs. Review the following items and determine which are applicable to your program.

1. Designate someone to be responsible for the Radiation Protection Program.

In larger facilities where more than 5 employees are involved in radiography, this person is generally referred to as the Radiation Safety Officer and is responsible for maintaining the radiation dosimetry reports, ensuring that personal dosimetry is worn properly, collected and mailed at the assigned frequency, and familiarizing new employees regarding the facility's Radiation Protection Program. This person would also be responsible for counseling employees who receive unusually high exposures.

In a small facility, this person may or may not be the office manager, physician in charge or radiologic technologist. Primarily, this person would be responsible for keeping all radiation dosimetry reports. Or if the employees were not monitored, this person would take responsibility to inform employees as to the safety precautions to be used in and around radiation areas.

2. Annually audit the Radiation Protection Program.

In a larger facility, this would include a review of all mandatory records, dosimetry reports, incident reports, overexposures, in-service training, and evaluation of the effectiveness of the Radiation Protection Program.

3. Provide individual radiation monitoring devices according to the requirements in RH-1302.

Simply put, this requires that any individual who has the expectation of receiving 10% of the annual occupational exposure limit (5 rem), which would be 500 mrem per calender year, should be monitored.

4. Provide annual notification of individual exposure to any occupationally exposed individual whose annual exposure exceeds 100 mrem or to any individual who requests their own exposure record as required in RH-2804.

This may be as simple as providing each employee a printout of their annual exposure for review and signature or as detailed as providing a copy of each individual's annual report for his/her own records. Those reports may either be provided by the dosimetry vendor or developed by the facility using information gleaned from the collective annual report. (See attached Form Y.) The notification must include the components listed in RH-2804.a.

Please consider printing a copy of the exposure records at least quarterly for review by monitored employees and/or compliance inspectors.

5. Post "Notice to Employees" and provide access to the <u>Arkansas State Board</u> of Health - Rules and Regulations for Control of Sources of Ionizing Radiation as required in RH-2802.

These items are available online or may be obtained from the Radiation Control Section of the Arkansas Department of Health.

Things to remember:

*All overexposures shall be reported to the Department of Health, Radiation Control Section, as soon as possible after they are noted. The contact number is (501) 661-2301.

*The vendor or the facility shall not make adjustments to any personnel dosimetry without prior written authorization from the Department of Health, Radiation Control Section.

*The extent of your facility's Radiation Protection Program must be commensurate with your scope of practice as it applies to ionizing radiation or the use of radioactive materials. The greater the scope of practice, the more employees involved in radiography, the greater the number of examinations performed at your facility, the more in-depth your Radiation Protection Program should be.