

Radiation Safety Training Videotapes

Model 49-1 Series



Education and
Training

Radiation Risks Revisited

- Approved for 0.50 Category A Continuing Education Credit
- Explains the risks from occupational radiation exposure, based on the NRC's February 1996 Regulatory Guide 8.29 *Instruction Concerning Risks from Occupational Radiation Exposure*

Radiation Risks Revisited reviews the regulatory guide and explains occupational exposure risks, so personnel can make an informed decision regarding their own personal radiation exposure risk.

Radiation Risks Revisited is a "must see" for senior personnel, as well as new employees.

Topics include:

- Somatic, genetic and teratogenic effects
- Internal vs. external exposures
- Background radiation
- The linear no-threshold controversy
- Occupational dose limits
- Cancer risk estimates
- Prompt and delayed effects
- The individual's decision regarding radiation exposure risk acceptance

It is crucial that all personnel working with radiation are knowledgeable about:

- The potential side-effects of routine occupational radiation exposure
- Occupational dose limit for an adult
- How occupational exposure is calculated for persons working with radiation

Running Time 24 minutes

Available Model(s)

49-153 *Radiation Risks Revisited*, NTSC format

49-153-2200 *Radiation Risks Revisited*, PAL format

49-159 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. NTSC format

49-159-2200 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. PAL format

Radiation Protection Standards

- Explains NRC 10CFR Part 20 Standards for Protection Against Radiation
- An essential training program for all hospital personnel
- Makes understanding and implementing the NRC 10CFR Part 20 Standards for Protection Against Radiation easy
- Discover the details of the standards for protection against radiation and the impact these standards will have on the workplace
- Targeted to general hospital audiences; radiology and non-radiology employees alike
- Provides a method of qualifying for 1.0 continuing education credit and obtaining in-service education

Effective January 1994, the Nuclear Regulatory Commission's 10CFR Part 20, Standards for Protection Against Radiation; Final Rule, became law. And with this law came the requirement that radiation workers be instructed in the details of these new regulations.

The Nuclear Regulatory Commission's training requirement affects all users of radioactive material and radiation sources in the United States. Now hospitals are faced with the major task of not only implementing these rules, but also imparting these revised regulations to their workers in order to properly prepare them for the changes that will be forthcoming.

This comprehensive 39-minute videotape provides the mandatory new regulation training that is needed for all hospital employees working in radiation areas. For example, the new regulations:

- Contain major changes affecting dose limitations for adult workers
- Establish explicit dose limits for the public, and for the female worker's embryo/fetus
- Re-examine assumptions regarding the linear non-threshold dose effect relationship
- Adopt an effective dose concept that requires combining external and internal dose to arrive at a total dose equivalent
- Require management to develop, document and implement a radiation protection program that will ensure compliance with the new standards
- Necessitate new record-keeping procedures

This videotape program has been granted continuing education credit status by the American Society of Radiologic Technologists. The vital information that is presented in *Radiation Protection Standards* makes this a "must have" videotape, one that will guarantee that hospital workers receive the information they require on these new standards for protection against radiation.

Running Time 39 minutes

Available Model(s)

49-151 *Radiation Protection Standards*, NTSC format

49-151-2200 *Radiation Protection Standards*, PAL format

49-159 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. NTSC format

49-159-2200 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. PAL format

Hospital Radiation Protection Practices

- A comprehensive videotape training program for all medical personnel
- An essential training program, for all hospital personnel, that provides an excellent overview of radiation protection in a hospital setting
- In-depth descriptions of current radiation protection procedures required by government regulations

This videotape training program provides hospital employees working in radiation areas with information on current radiation protection procedures required by government regulations for the medical use of radioactive materials.

The program consists of two segments. The subjects covered in the first segment:

- General introduction to ionizing radiation
- History of radiation use and protection
- Biological effects of radiation
- General principles of radiation protection such as: use of time, distance and shielding
- Principle of maintaining as low as reasonably achievable low exposures (the ALARA principle). This information is ideally suited for general audiences. It will easily fit into a hospital's indoctrination program for non-radiology employees (such as nurses) who require general knowledge about radiation protection

The subjects covered in the second segment:

- Basics of a hospital radiation safety program required by government agencies in the area of teletherapy, brachytherapy and diagnostic, and nuclear therapy medicine
- Review of what is required of a hospital radiation safety program
- Review of what is useful for a hospital radiation safety committee

Hospital Radiation Protection Practices delivers well-prepared information that can offer your staff a higher level of radiation protection information and provide your technologists with continuing education credit.

Running Time 58 minutes

Available Model(s)

49-150 *Hospital Radiation Protection Practices*, NTSC format

49-150-2200 *Hospital Radiation Protection Practices*, PAL format

49-159 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. NTSC format

49-159-2200 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. PAL format

Radiation Safety and Common Sense

- The perfect educational training video for anyone concerned about radiation in the workplace
- Everything you need to know about radiation and safety, presented in an entertaining and informative format

Topics include:

- Energy as particles and rays
- Background radiation
- Irradiation and contamination
- Time, distance and shielding
- Techniques to minimize exposure
- Risks associated with typical occupational exposures

Radiation Safety and Common Sense is a videotape training program that explains the underlying concepts of radiation and safety in everyday, non-technical layman's terms. This comprehensive videotape tells the radiation/radiation safety story through basic concepts and everyday scenarios that everyone can relate to, making it easy to understand and enjoyable to watch.

The program has been designed to explain radiation safety to non-radiation workers with no prior radiation experience or knowledge. Everyone in your facility will gain insight and have a better understanding of the benefits and risks of radiation. Even the most experienced workers will benefit from the program as it offers a new perspective on potential radiation exposure in the workplace and its effects. It offers many suggestions on how all workers can take precautions to minimize exposure and risk.

This one-of-a-kind videotape is an invaluable educational training tool. By providing simple answers to complex questions, it will help all employees feel more comfortable about their work environment.

Running Time 26 minutes

Available Model(s)

49-152 *Radiation Safety and Common Sense*, NTSC format

49-152-2200 *Radiation Safety and Common Sense*, PAL format

49-159 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. NTSC format

49-159-2200 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, 49-155. PAL format

Fundamentals of Radiation Safety

■ Approved for 1.0 Category A Continuing Education Credit

An introductory training videotape on the nature and characteristics of ionizing radiation and the methods and techniques used to keep radiation doses to individuals as low as reasonably achievable and to minimize the potential for accidental exposures.

Topics included in the discussion are:

- The nature and characteristics of ionizing radiation
- Radioactivity and half-life
- Natural and man-made sources of radiation
- Radiation quantities and units
- Internal and external exposures
- Irradiation and contamination
- Use of time, distance, and shielding
- Radiation monitoring
- Contamination control

This videotape is ideal for training individuals whose potential for exposure is such that an extensive radiation safety training program is not required. However, additional training will be required regarding the potential radiation hazards associated with the work, the employer's radiation safety program, and the necessary job related skills.

Running Time 54 minutes

Available Model(s)

49-155 *Fundamentals of Radiation Safety*, NTSC format

49-155-2200 *Fundamentals of Radiation Safety*, PAL format

49-159 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. NTSC format

49-159-2200 Comprehensive Radiation Safety Videotape Training Program Package, contains all five videos: Models 49-150, 49-151, 49-152, 49-153, and 49-155. PAL format

Radiation and Pregnancy: A Decision to Declare

■ Approved for 0.5 Category A Continuing Education Credit

■ This video is intended for all female radiation workers of child bearing age and their supervisors.

Based on the NRC's Regulatory Guide 8.13, this video program looks at the potential effects of occupational radiation exposure to the pregnant worker's embryo/fetus. Beginning with a summary of genetics, this training videotape discusses the effects of radiation exposure on the embryo/fetus and the requirements for declaring the pregnancy to initiate the 500 millirem (5 millisieverts) fetal limit for the duration of the gestation period.

Paralleling an overview of genetics and radiation protection, this video looks at the significant changes that have taken place in both fields in the last century. From Thomas Morgan and his fruit flies to HJ Muller and genetic mutations caused by radiation to Watson, Crick and Franklin and the discovery of the structure of DNA, a brief history of genetics serves the viewer well.

While these advances on the genetic front were taking place, equally important advances in the understanding of radiation and radioactivity were taking place. Roentgen and the discovery x-rays, the first radiation protection recommendations, the standardization of measurements, the skin erythema dose, and the conclusion that the embryo/fetus of a pregnant radiation worker should be treated as a "visitor."

Also covered in this video:

- Requirements for declaring pregnancy to initiate the 500 millirem fetal limit for the duration of the pregnancy
- Potential outcomes of declaring the pregnancy
- Will I be able to continue to perform my normal job functions?
- What if I can't?
- Will I lose my job?
- Do I have to declare my pregnancy in writing?
- Can I revoke my written declaration?

Running Time 24 minutes

Available Model(s)

49-154 *Radiation and Pregnancy: A Decision to Declare*, NTSC format

49-154-2200 *Fundamentals of Radiation Safety*, PAL format

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA. Specifications are subject to change without notice.

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