

UK Radiation Safety Training for Radioactive Material and X-Ray Users

All UK employees and students working with **X-Ray or Radioactive Material** must receive On-Site & Initial Radiation Safety Training, as per Federal and State regulations, before starting as a radiation worker.

There are 3 training sessions the worker must attend, depending on worker type and job function:

1. **On-Site Training:** This must be provided by the Authorized User or Unit Supervisor at the individual's place of work. A completed On-Site Training checklist is provided to the individual as evidence of receiving this part of the training. The On-Site and Initial Training enables an individual to begin as a radiation worker.

The **Worker Registration & On-Site Training** forms **MUST BE COMPLETED AND SIGNED** by the Authorized User/PI who holds the license to the lab you will be working under **BEFORE ATTENDING** Initial Training and receiving a dosimetry badge if applicable. Females are required to read and sign the **Fetal Safety Policy** in addition to the other forms listed above. You will bring all these signed forms with you to Initial Training.

2. **Initial Training:** This is held every Tuesday at 9:00am for **radioisotope users** and every Thursday at 1:30pm for **radiation machine users** at the Radiation Safety Office, 102 Animal Pathology Building. Please arrive about 10 minutes early to sign in and process your paperwork. If you cannot make this scheduled time, call the Radiation Safety Office at 218-3722 to schedule a specific appointment. This training is a lecture lasting about 40 minutes, and you will receive an outline when you come to the training. **If you work in veterinary or accelerator research, please call or email to set up this training.**
3. **Basic Radiation Safety Training:** This is for radioactive material users and is offered once a month at the Radiation Safety Office, 102 Animal Pathology Building. **Research workers are required to attend this course in addition to the Initial Training which covers safety using radioactive materials and regulations.** This is a 3-hour course and includes a test. No paperwork is required, and a certificate will be emailed to you once completed. Please see our website for specific dates and times.

Online Training:

Additional training is available online on SciShield (<https://uky.scishield.com>). The course offered are **Advanced Radiation Safety** for radioactive material users and **Analytical X-Ray Safety** for x-ray users. This can be taken within the first 2 to 4 months of your on-boarding once the other training has been completed. An online course for **Uranyl Acetate** users is also available on SciShield (<https://uky.scishield.com/node/2078579>). Links can also be found on our website <https://researchsafety.uky.edu/radiation-safety>. Contact the Radiation Safety Office at (859)-323-6777 if you need additional information.

APPENDIX C
UNIVERSITY OF KENTUCKY
RADIATION WORKER REGISTRATION FORM

Office Use Only

Wear Date _____

Spare Badge # _____

Binary # _____

PARTICIPANT NUMBER

LAST NAME	FIRST NAME	MI	SEX	BIRTH DATE
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UK ID	LINK BLUE	DEPARTMENT	ROOM #	BUILDING
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WORK PHONE	START DATE	PREVIOUS AUTHORIZED USER (S) AT UK
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RADIATION SOURCES					
TYPE OF TRAINING	WHERE TRAINED Date	DURATION OF TRAINING	ON THE JOB (circle one)		FORMAL COURSE (circle one)
Principles and practices of radiation protection			YES	NO	YES NO
Radioactivity measurement standardization and monitoring techniques and instruments			YES	NO	YES NO
Mathematics and calculations basic to the use and measurement of radioactivity			YES	NO	YES NO
Biological effects of radiation			YES	NO	YES NO

PREVIOUS EXPERIENCE WITH RADIATION				
RADIOACTIVE MATERIALS	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DATES OF USE	TYPE OF USE

☐ I HAVE HAD **NO** PREVIOUS OCCUPATIONAL EXPOSURE

☐ I HAVE HAD PREVIOUS OCCUPATIONAL EXPOSURE (COMPLETE EXPOSURE HISTORY BELOW)

NAME & ADDRESS OF EMPLOYER(S)

DATES EMPLOYED

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To (last employer): _____ You are hereby authorized to furnish the University of Kentucky all available information concerning my radiation exposure history. I was associated with your organization from: _____ to _____

Radiation Worker Signature _____ Date _____

PI / AUTHORIZED USER (PRINT)

PI / AUTHORIZED USER (SIGNATURE)

DATE

University of Kentucky

On-Site Radiation Safety Training

For New Radioactive Material Users

On-Site Training Check List

To be completed and signed by the Authorized User/PI who holds the license to the lab

- ☐ Radiation Safety Manual
- ☐ Potential hazards from specific radionuclides in use
- ☐ Radiation safety procedures
- ☐ Work safety rules, SOPs
- ☐ Emergency response procedures
- ☐ Location of radioactive material and waste
- ☐ Use of safety equipment, shields, meters, gloves, and eye protection
- ☐ Radioactive material use procedures, protocols
- ☐ Radiation safety records system (surveys, inventory, etc.)

Worker Signature: _____ Date: _____

I have covered all of the above topics: _____
Authorized User

University of Kentucky

Initial On-Site Radiation Safety Training For New X-Ray Users

On-Site Training Check List

To be completed and signed by the Authorized User/PI who holds the license to the lab

- ☐ X-Ray Radiation Safety Manual
- ☐ Potential hazards from X-Ray Sources
- ☐ Radiation safety procedures
- ☐ Work safety rules, SOPs
- ☐ Emergency response procedures
- ☐ Location of on and off switches
- ☐ Use of safety equipment, shields, meters, gloves, and eye protection – lead aprons if needed
- ☐ Radiation use procedures, protocols
- ☐ Radiation safety records system

Worker Signature: _____ Date: _____

I have covered all of the above topics: _____
Authorized User

UNIVERSITY OF KENTUCKY

RADIATION SAFETY FETAL POLICY

The UK fetal dose policy incorporates safety information and radiation dose guidelines for ensuring safe radiation limits for the embryo/fetus of occupationally exposed employees.

The University of Kentucky provides a voluntary radiation protection program for employees working with any radiation source (radioactive material, x-ray, etc.) and is available for radiation workers who are pregnant or planning a pregnancy. Radiation workers are strongly advised to notify the Radiation Safety Officer as soon as possible after a pregnancy is confirmed. The declaration of pregnancy is voluntary, but it must be made in writing. The University is then obligated to take steps to ensure that the occupational radiation dose received by the embryo/fetus does not exceed the limit specified by State and Federal regulations of 500 millirem over the entire gestation period. In addition, the National Council on Radiation Protection and Measurements (NCRP) recommends that the dose for any one month during the pregnancy should not exceed 50 millirem. The University policy includes this NCRP recommendation on the monthly limit as well as the stated regulatory limit for the gestation period.

It is the responsibility of the employee and her supervisor to observe the principles of radiation safety and use standard precautionary procedures in the performance of her duties to keep her radiation dose as low as reasonably achievable (ALARA) at all times and especially during the gestation period. The Radiation Safety Office will provide training and assistance in maintaining ALARA doses.

The program presents specific information for applicable employees (including spouses if desired) and their supervisors. The special circumstances of embryo/fetal radiation exposure, precautions, radiation monitoring and safety regulations are included. The maximum permissible radiation exposure to the fetus is 500 millirems over the entire gestation period. Contact the Radiation Safety Officer if you are pregnant or planning a pregnancy as early as possible since the embryo is more sensitive to radiation during the first trimester.

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