

New Investigator Guide

Research Hazardous

There are many physical, chemical or biological hazard encountered in research. There also may be exposure to radiation emitted by radioactive materials or X-ray generating equipment. The use and disposal of such hazards are governed by many Federal, State and local agencies. Regulations promulgated by the Environmental Protection Agency, the Nuclear Regulatory Agency, the Occupational Health and Safety Administration, and the State of Ohio must be adhered to by all laboratory personnel. It is the responsibility of the principal investigator to ensure compliance with these regulations in his or her laboratory.

Chemical and Physical Hazards

A hazardous chemical is defined as any chemical that may cause a physical or health hazard. Examples of such chemicals are flammable liquids and solids, corrosives, oxidizers, and any chemicals that are considered toxic such as heavy metals. The KSU Office of Research Safety has developed a Chemical Hygiene Plan (CHP) that all laboratories must follow. The CHP has incorporated all the above regulatory requirements regarding use and disposal of hazardous chemicals. All laboratory personnel (principal investigators, employees, students, and volunteers) who work in a laboratory must attend an OSHA Laboratory Safety Training session offered by the Compliance and Research Safety Office. Previous training at other institutions does not preclude any laboratory personnel from this requirement.

General Biohazards

The term "biohazards" generally refers to toxins, carcinogens, mutagens, teratogens, all microbiological agents and nanoparticles. Examples of materials that fall into the biohazard classification are viral, bacterial, and fungal agents, and chemical toxins. Any work involving human blood, blood products, and body fluids must, at a minimum, follow Universal Precautions. Principal investigators proposing to conduct research involving biological agents or certain toxins must complete a Request for Biohazardous Agents Use form.

Recombinant DNA/Microbial Pathogens/Human Tissues

All projects involving the use of recombinant DNA, viral vectors and microbial pathogens must comply with the current guidelines from the CDC and NIH. Principal investigators at KSU who conduct experiments involving recombinant DNA, viral vectors and microbial pathogens must complete the Request for Biohazardous Agent Use form and the fulfill the KSU rDNA assurance requirements. The use of tissue or cells of human origins may require an IRB submission or BBP training.

Radiation

All projects involving radioactive materials or radiation-generating equipment must be coordinated with the Radiation Safety Officer. All uses of radioactive material within the University must be conducted under the direction of an Authorized User, generally the Principal Investigator. To become an Authorized User the PI must complete the New Use of Radioactive Materials and User Experience and Training Forms which are submitted to the State of Ohio for review and approval. Once approved the PI is added to the KSU Radioactive Material License as an Authorized User. All purchases of radioactive materials must be approved by the RSO. Anyone working with radioactive materials must attend Radiation Safety Training offered by the Office of Research Safety. Previous training at other institutions does not preclude any laboratory personnel from this requirement.

For forma and more information contact;

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For more information: <http://www.kent.edu/compliance/research-safety-and-compliance>