Animal Experiments Using Known or Suspect Carcinogens

Summary: You must follow these procedures for animal experiments using:

- Substances regulated by the California Occupational Safety & Health Administration (Cal/OSHA) or listed by the National Toxicology Program (NTP) as "Known to Be Human Carcinogens." (PDF)
- Substances listed as Reasonably Anticipated to Be Human Carcinogens (PDF), listed by the NTP

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<th>Checklist</th>
<th>What to do</th>
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<td>☐ Follow all appropriate procedures.</td>
<td>Read Chemical Carcinogen Overview to learn how to determine if the substance you intend to use is a known or suspect carcinogen.</td>
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<td>• If the material is a known carcinogen, read How to Handle Known Human Carcinogens.</td>
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<td>• If the material is a suspect carcinogen, read How to Handle Suspect Human Carcinogens.</td>
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<td>• Follow the rest of the steps in this checklist.</td>
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<td>☐ Obtain required approvals before beginning work.</td>
<td>• For use of known carcinogens request prior approval from:</td>
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<td>o Environment, Health &amp; Safety’s chemical safety officer, (415) 476-0964.</td>
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<td>☐ Follow these training guidelines.</td>
<td>A principal investigator (PI) or a knowledgeable designee must provide appropriate safety training.</td>
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| Designate regulated area, label containers and cages. | Designate regulated area. Entrances to regulated areas must be posted with signs bearing the legend:  
**CANCER-SUSPECT AGENT**  
**AUTHORIZED PERSONNEL ONLY** |
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<td>Entrance: Request posting from EHS Specialist</td>
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- Inform employees about handling the drug or chemical, its physical properties (including solubility), and health effects seen in experimental studies and other applicable sources.  
  - Review toxicological data from similar compounds if toxicological information is limited.  
- **Explain possible routes of exposure** as appropriate:  
  - Inhalation  
  - Skin absorption  
  - Ingestion  
  - Accidental injection  
- **Provide and train** employees in the proper use of personal protective equipment and engineering controls to prevent exposure.  
- Call LARC department office at 476-9481 to provide Animal Care staff training. |
Containers must display the following warning immediately under, or adjacent to, the contents identification:

CANCER-SUSPECT AGENT

Animal cages must display the following warning:

CANCER HAZARD

HAZARD IDENTITY (enter info)

Request carcinogen stickers from LARC supervisor.

- Maintain the signage according to this criteria:
  - Aqueous dosing solutions – Once the bedding has been changed, the warning sign can be removed.
  - Oil-soluble dosing solutions – Maintain the signage for 96 hours.

- **Injection or gavage**: Use syringes and intravenous sets with Luer-lock fittings, if possible, when material is given via injection or gavage.
  - Perform priming into a sterile, alcohol-dampened gauze sponge.
  - Do not prime sets or syringes into the sink or any open receptacle.
| Dispose of hazardous waste properly. | All animals must be housed in micro-isolator cages.  
  Diet: Use a closed-caging system if the substance must be administered in the diet. Mix all diets containing the hazardous material in closed containers inside a chemical fume hood or Class II Type A2 (vented) biosafety cabinet.  
  Animal bedding, waste, and water — in addition to waste chemicals — may be subject to hazardous waste disposal requirements.  
  **For storage and disposal of hazardous chemical waste refer to:**  
    - UCSF Chemical Safety Manual  
    - OEH&S On-line Tag Program [http://otp.ucsf.edu](http://otp.ucsf.edu)  
    - Send hazardous (chemical) waste disposal notification by logging on to your account.  
    - Select the containers as ready for disposal.  
  Contact your EHS Specialist if you have questions about hazardous waste. |